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Within-patient perceptions of alliance and attunement: Associations with progress in psychotherapy

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Abstract

The most frequently examined aspect of the therapeutic relationship is the working alliance, which reflects the conscious collaborative bond, and agreement on task and goal. In addition to the established importance of the working alliance, the therapists' attunement and responsiveness might reflect another important aspect of the therapeutic relationship that can be considered in relation to session-by-session progress over treatments. Emerging research suggests that the quality of the working alliance not only differs between patients but also within patients over time. However, little is known about the quality of the therapeutic relationship between and within patients in relation to progress in psychotherapy. We examined fluctuations of the working alliance measure (WAI) and the newly developed measure of the Patients' Experiences of Attunement and Responsiveness (PEAR) during treatment in a naturalistic sample of patients in an outpatient psychotherapy clinic. Multilevel modelling was used to examine the respective contribution of these measures to subsequent improvement in psychological functioning longitudinally. Results suggest that the within-patient effect, instead of between-patient effect, was significant for WAI (and did not reach significance for PEAR), indicating that the fluctuation of WAI was predictive of psychological functioning in the subsequent month. Based on these findings, therapists and their patients might benefit from regular tracking of the patientreported working alliance. The findings underscore the importance of the alliance, specifically at the within-patient level. It also highlights the challenge for research to tap into other aspects of the therapeutic relationship that can help explain progress in therapy. Given the breadth and accessibility of the working alliance construct, more work is needed for researchers to examine the construct of attunement and responsiveness.

KEYWORDS

attunement, OQ, psychotherapy change, responsiveness, working alliance

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1 | INTRODUCTION

The therapeutic relationship, broadly referring to the interpersonal relationship between the patient and therapist, is the most investigated and robust predictor of treatment outcome in the psychotherapy literature to date. The vast amount of research on the therapeutic relationship focuses on assessments of one specific aspect of the therapeutic relationship: the working alliance. Bordin (1979)'s pan theoretical definition of the working alliance as being composed of the emotional bond between patient and therapist, agreement on tasks and agreement on goals is widely accepted. Although the concept of the working alliance originated in the psychoanalytic literature, the centrality of the therapeutic relationship has origins in the humanistic and cognitive-behavioural traditions as well (Doran, 2016).

This recognition of the role of the working alliance is supported by empirical findings, in that the strength of the working alliance demonstrates a modest but consistent impact on psychotherapy outcome (Fluckiger et al., 2012). This has been shown to be the case even when temporal precedence between alliance and symptoms is taken into account (Falkenström et al., 2013; Zilcha-Mano, Dinger, et al., 2014; Zilcha-Mano & Errázuriz, 2015). Recently, a meta-analysis of 295 empirical studies reported an average association (r = .278) between the quality of the working alliance during psychotherapy and the outcomes of a wide range of therapies (Flückiger et al., 2018).

The working alliance is most commonly assessed with the patient-reported working alliance inventory (WAI; Horvath & Greenberg, 1986, 1989) and its short form (WAI-S; Tracey & Kokotovic, 1989). The working alliance, as measured with the WAI, has been shown to be an essential ingredient in producing therapeutic change in treatment across modalities (Horvath & Greenberg, 1986; Lambert & Barley, 2001; Norcross & Lambert, 2011), with session-to-session working alliance changes predicting subsequent session-to-session symptom changes (Crits-Christoph et al., 2011).

Although the terms 'therapeutic relationship' and 'working alliance' are sometimes used interchangeably, the construct of the working alliance only captures one aspect of the therapeutic relationship. Other interrelated components of the therapeutic relationship include, for example, the real relationship (genuine, real person-to-person human connection outside the professional roles of patient and therapist) and the (counter)transference configuration (i.e., the patient's relationship expectations and the therapist's triggered responses to a patient) (e.g., the tripartite model, Gelso, 2014; Zilcha-Mano, Dinger, et al., 2014).

Another interrelated component of the therapeutic relationship that has gained research attention across a wide range of treatment modalities in recent years is attunement and responsiveness. Therapists' attunement, defined as the therapist's interpersonal ability to achieve optimal benefit for the patient by adjusting their responses to the current state of the patient and the interaction in that moment (Hatcher, 2015; Stiles, 2009; Stiles et al., 1998; Stiles & Horvath, 2017), is ubiquitous and an essential element of successful psychotherapy. Therapists' attunement and responsiveness to the patient is thought to create a sense of psychological safety,

Key practitioner message

The findings affirm the construct (and measure) of the working alliance, when considered per individual patient, as significant for progress. Therapists and their patients might benefit from regular tracking of the patient-reported working alliance.

resembling a secure relationship with a good-enough mother involving a sequence of (mis)attunement and empathic coordination (Beebe & Lachmann, 2002). Within the therapeutic relationship, this attunement allows for a reparative emotional experience (Alexander & French, 1980) that permits the patient to recall and endure previously warded off painful memories and experiences thereby allowing for fuller understanding of these events as well as the opportunity to work through them (Silberschatz, 2005; Weiss, 1993). If a therapist can be 'appropriately responsive' or even 'optimally responsive' (Bacal, 1985), this implies that there might also be moments where the therapists' level of responsiveness is inappropriate. Indeed, like the working alliance, assessments of the level of attunement and responsiveness might be most informative when it is lacking. Misattunement, failing to be attuned to the other's needs, has long been shown to have detrimental effects (Mesman et al., 2009) and is experienced by patients as hindering their psychotherapy progress (Castonguay et al., 2010). Just like in infant-parent interactions, therapy sessions reflect a constant rupture and repair process of (non) verbal interactions to ensure that the patient feels heard and seen as best as possible (Gazzillo, De Luca, et al., 2019). Notably, according to the transtheoretical rupture-repair model described by Safran and Muran, it is not so much the frequency or presence of a rupture per se but the identification and repair of these ruptures that function as an important change process related to better treatment outcome (Eubanks et al., 2021; Safran et al., 2011).

Different treatment approaches may work differently to facilitate and support patients' goals in psychotherapy (e.g., Bacal, 1985; Boritz et al., 2021; Elkin et al., 2014; Håvås et al., 2015). Although attunement and responsiveness is sometimes seen as a common factor across theoretical orientations (Eubanks et al., 2021), its role in therapy differs across approaches. In Cognitive Behavioural Therapy, for example, the therapist's 'responsiveness' is considered a 'common factor' in psychotherapy—an important part of creating a trusting and collaborative therapeutic relationship. Within the framework of Cognitive Behavioural Therapy, therapist responsiveness thus models healthy, valuedriven relational behaviour and provides the patient a new corrective emotional experience, which updates unhelpful beliefs and serves as a natural reinforcer for the patient's new behaviour (Constantino & Westra, 2012). As such, it is considered an essential condition for helping the patient take risks and develop new behaviours both within the session and outside in the patient's life (Coyne et al., 2021).

Thus, attunement and responsiveness might reflect a relevant complementary aspect of the therapeutic relationship, potentially

salient for patients' progress in treatment. Whereas the working alliance represents a collaborative relationship in which the therapist is liked by the patient with both in full agreement with each other, the construct of attunement and responsiveness more clearly reflects the responsibility of the therapist. It is the therapists' task to understand the patients' needs in the moment and to continuously negotiate with and adapt to the individual patient.

1.1 | The therapeutic relationship within the framework of control mastery theory (CMT)

CMT (Sampson, 1992; Silberschatz, 2005; Weiss, 1993) offers a way of understanding the patients' experience of the therapeutic relationship, including the working alliance and therapists' attunement and responsiveness. This contemporary relational theory of psychopathology and psychotherapy explicitly focuses on patients' sense of safety for therapeutic progress, patients' agency to master their problems and their active participation in testing their pathogenic beliefs in the relationship with the therapist.

More specifically, CMT can be described as an integrated cognitive-relational psychodynamic theory that provides a framework for considering the unique ways individual patients work in psychotherapy and can be applied to help therapists understand how to best help their patients. CMT anchors the concept of the therapeutic relationship to the 'patient's plan formulation', which may be used by therapists as a 'compass' and as a guide for optimizing the working alliance and therapeutic responsiveness (Silberschatz, 2021). A patient-specific plan formulation includes several elements, including a description of the patient's adaptive goals, traumatic events that gave rise to emotion-laden pathogenic beliefs (i.e., maladaptive emotion-laden internalized cognitions that are specific to the individual) that impede goal attainment and ways in which the patient may test the therapist to disconfirm these pathogenic beliefs (Silberschatz, 2005). Therapists who understand the patient's casespecific plan are more likely to react in a manner that is responsive, appropriate or 'right' for the particular patient (Silberschatz, 2017).

According to CMT, individuals are motivated to master their problems and actively 'test' the validity of their pathogenic beliefs in relation to the therapist, in the hope that the therapist will act in ways that disconfirm their pathogenic beliefs (Weiss, 1993). Therapist interventions or attitudes are considered responsive to the extent that they are in accord with the patient's plan—that is, support the patient's conscious and unconscious goals and disconfirm pathogenic beliefs (Gazzillo, Genova, et al., 2019; Silberschatz, 2021).

Patients discern the therapist's attitudes and responses ('treatment by attitude'; Sampson, 2005) as either supportive of (i.e., safe and pro-plan) or in opposition to the work that the patient is attempting to do (i.e., unsafe and anti-plan). The degree to which the therapist 'passes' a patient's tests holds great significance for therapeutic progress and enhanced treatment outcomes (for reviews, see Curtis & Silberschatz, 2005; Silberschatz, 2005, 2010). Notably, according to CMT, therapists might be more likely to 'pass a test' if

they are attuned and responsive to the patient's unique needs and to the patients' (direct or implicit) guidance in what would be most helpful to them at this moment in time. In other words, a patient may 'coach' the therapist by communicating important information about the kinds of attitudes and responses that will be most useful to them (Bugas & Silberschatz, 2000; Sampson, 2005). A case-specific formulation, in turn, is the product of reciprocal responsiveness between the patient and therapist. That is, while the therapist is attempting to formulate the patient's goals for therapy and what is inhibiting their pursuit or attainment, the patient is trying to discern how best to work with the therapist—that is, how to respond to the therapist in a manner that will convey the patient's goals and conflicts, as well as what the therapist can do to help the patient with these issues.

1.2 | The therapeutic relationship as predictor of psychotherapy change

When investigating the potential of the contribution of the therapeutic relationship to subsequent improvement in psychological functioning, it is important to disentangle between patients' general therapeutic experiences and their specific fluctuations of these experiences during treatment (Falkenström et al., 2016; Strunk et al., 2010; Zilcha-Mano, 2017; Zilcha-Mano et al., 2016). By doing so, one may better understand whether generally experiencing a strong therapeutic relationship, relative to other patients, is important to symptomatic change or whether the patients' specific fluctuations in therapeutic relationship variables, relative to their own general experiences, may lead to this change in symptoms.

Indeed, several previous studies have distinguished the within—vs. between—person associations between the working alliance and outcomes (Falkenström et al., 2016; Xu & Tracey, 2015; Zilcha-Mano, 2017; Zilcha-Mano et al., 2016). Regarding the between-patient analyses, numerous studies indicated strong between-patient associations for alliance and symptoms, such that for patients who reported higher alliance compared with the average level of the sample, those patients also tended to report lower symptoms compared with the average level of the sample.

Results for within-patient associations between alliance and symptoms have been mixed. Some early studies indicated non-significant results or suggested that symptom decreases predicted higher alliance in these same treatments subsequently (e.g., Strunk et al., 2010). Others reported reciprocal relationships between the working alliance and symptoms (Flückiger et al., 2020; Xu & Tracey, 2015) or found that the working alliance contributed to subsequent symptom reduction (Falkenström et al., 2016; Zilcha-Mano, 2017). As with research on the working alliance, disentangling between-patient and within-patient impacts may also be crucial in understanding the role of attunement in therapeutic changes. Therapeutic attunement may be particularly relevant when it refers to the level of in-the-moment responsiveness, which often fluctuates over time. Therefore, understanding how fluctuations in therapeutic relationship variables are related to symptom changes may be informative

in understanding the contribution of these aspects of the therapeutic relationship to the therapeutic process.

1.3 | Aims

In this study, we aimed to explore the effect of between-patient and within-patient differences in the patient-reported quality of the therapeutic relationship on treatment progress in treatments conducted in an outpatient psychotherapy setting. More specifically, we aimed to examine two aspects of the therapeutic relationship in these treatments: The commonly assessed quality of the working alliance and the patients' perceived attunement of the therapist, a construct that is less commonly assessed but particularly relevant to CMT.

Our research questions were twofold: (1) Do patients' levels of reported working alliance post-session predict patients' psychological functioning throughout the course of individual psychotherapy? (2) Do patients' levels of experienced attunement and responsiveness post-session predict patients' psychological functioning throughout the course of individual psychotherapy? Using a longitudinal mixed model for each measure separately, we aimed to test whether fluctuations in either working alliance or attunement (within-patient session scores relative to their mean scores) might be a stronger predictor of outcome 1 month later, compared with patients' 'general level' of working alliance or attunement (between-patient mean scores), controlling for psychological functioning at the previous assessment.

In line with previous studies on the relationship between the working alliance and treatment outcome, we expected that in our sample of individual psychotherapies, the patient-reported working alliance in a given session would predict the patients' reported functioning 1 month later, after controlling for previous symptoms. When disentangling patients' general experience and specific fluctuations of the working alliance, we expected specific fluctuations in levels of working alliance to be most predictive of change in psychological functioning 1 month later.

Based on the previous preliminary study of 38 patient-therapist dyads that showed that attunement was significantly related with the patients' psychological functioning at the concurrent session (Snyder & Silberschatz, 2017), and CMT's emphasis on in-the-moment responsiveness that fluctuates over time, we expected the patients' perceived attunement of the therapist to follow a similar predictive pattern.

2 | METHODS

2.1 | Treatment clinic

All participating patients in this study received therapy at an American psychotherapy training clinic specializing in individual psychotherapy and in the application of CMT to understand and guide treatment. This training clinic provides outpatient psychotherapy services to individuals with a range of psychological difficulties, including depression,

anxiety and interpersonal problems, and is not restricted by patients' psychiatric diagnosis or level of functioning. Typical of the routines in the training clinic, patients were assigned to therapists on the basis of clinician availability, size of caseload and various other practical considerations. In line with CMT, comprehensive case formulations, rather than diagnosis, were used to guide patients' treatment. The length of treatment was open-ended and determined on a case-by-case basis by the patient and the therapist. Treatments had a modal length of 1 year, one session per week.

2.2 | Procedures

The study was run in accordance with American Psychological Association standard ethical guidelines and was approved by the Institutional Review Board (022008). All of the participants were informed that their participation was voluntary and that they would not be compensated. To ensure a representative clinic sample, we invited all intake patients to take part in the study regardless of types and levels of symptomatology, ages, education levels and socio-economic backgrounds. Patients were recruited to the study after learning about the study either from their therapist or through flyers posted in clinic waiting rooms. Patients who wished to participate in the study completed informed consent forms before joining the study, and their next available session was used for data collection. All measures were filled out monthly. Participating patients (and therapists¹) completed three self-report measures at the end of the respective session. Participating patients were asked to complete the post-session self-report measures in the waiting area using paper and pencil. In order to avoid a response bias, therapists were not present during this time, and patients were asked to put the completed form in a locked box.

2.3 | Therapists

The 23 participating therapists were graduate trainees who used the CMT approach as described by Sampson, Weiss, Silberschatz and others (e.g., Sampson, 1992, 2005; Silberschatz, 2005; Weiss, 1993). The therapists attended weekly didactic training in CMT throughout their graduate training and participation in the study and received individual supervision twice a week by two different licensed mental health professionals practicing from a control-mastery perspective. The majority of therapists were female (n=17; 74%), ranging from 26 to 50 years old. The 23 therapists saw on average 7.52 patients, with some therapists seeing two patients who participated in the research, and other therapists seeing 19 patients who participated in the research.

2.4 | Patients

Participants were 173 consecutively admitted patients at the above described low-fee outpatient clinic, who were asked to complete

intake measures and monthly assessment measures as part of standard clinic practice. On average, the patients had had 12 therapy sessions with their therapist before they entered the study, ranging from 1 previous session to 27 previous sessions. Data from 38 of the 173 patients have been reported by Snyder and Silberschatz (2016). Over half of the patients were women (n = 92; 52%), ranging from 18 to 50 years old with an average age of 34 ± 11 years old. The majority (67%; n = 130) identified as White and had completed a university degree (75%; n = 146). In this outpatient clinic, no DSM diagnostic assessments were conducted, so no formal DSM diagnoses are available; however, as part of the clinic intake protocol, all of the patients completed the Beck Anxiety Inventory (BAI; Beck & Steer, 1993) and the Beck Depression Inventory-II (BDI-II; Beck et al., 1996) before the start of treatment. On average, the patients in our sample reported depression scores (M = 17; SD = 10) around the clinical cut-off of 17 (Beck et al., 1996) and average anxiety scores (M = 13; SD = 11) just below the clinical cut-off of 16 on the BAI (Beck & Steer, 1993), suggesting that many of the participants suffered from symptoms of anxiety and/or depression. In the reported sample, half of all patients scored above the clinical cut-off on the BAI and/or BDI (n = 88: 51%).

2.5 | Measures

2.5.1 | Working alliance

The quality of the working alliance was assessed with the 12-item Working Alliance Inventory-Short Form (WAI-SF; Hatcher & Gillaspy, 2006), using the patient version. The WAI-SF was adapted from the earlier versions of the WAI (Horvath & Greenberg, 1989) using extensive factor analyses. The WAI-SF assesses the level of agreement on the goals of treatment, agreement on the steps towards meeting the patient's goals and the relationship between the patient and therapist. The 10 items are rated on a Likert scale ranging from 1 (never) to 7 (always). A global working alliance rating of 4 (sometimes), the middle point of the scale, is interpreted as a neutral working alliance, with higher scores indicating a stronger working alliance (Horvath & Greenberg, 1989). After reversing the relevant items, a sum score was calculated to achieve a total working alliance score. The WAI-SF has shown adequate reliability and validity (Hatcher & Gillaspy, 2006). In the present study, the internal reliability level of the patient-rated WAI total score ranged from .73 to .76 on the different timepoints.

2.5.2 | Attunement

The Patient's Experience of Attunement and Responsiveness Scale Patient-version (PEAR; Silberschatz, 2009) is a 30-item self-report measure designed to assess the patient's experience of the therapist's degree of attunement and responsiveness during a therapy session. The 30 items on the PEAR are based on previous studies conducted

by the San Francisco Psychotherapy Research Group (Silberschatz & Sampson, 1991) and by a group of psychoanalytic therapists (Bush & Meehan, 2011) and were chosen because of their correlation with treatment outcome. Example items include 'My therapist understood me (i.e., my thoughts, feelings, goals) today'; 'I felt accepted by my therapist today'; 'My therapist had accurate empathy for my needs and feelings today'. The items are rated on a Likert scale that ranges from 0 to 3 with a rating of $0 = not \ at \ all$, 1 = slightly, 2 = moderately and $3 = very \ much$. These responses are then summed to achieve a total attunement and responsiveness score.

The internal reliability of the PEAR was high in the preliminary study reported by Snyder and Silberschatz (2016), and ratings on the PEAR scale have shown to be significantly related with psychological functioning as measured by the Outcome Questionnaire (OQ) at the concurrent session (Snyder & Silberschatz, 2016). In our dataset, the Cronbach's alpha for the PEAR total score ranged from .63 to .79 on the different timepoints.

2.5.3 | Psychological functioning

Patients' progress with regard to psychological functioning was assessed with the 45-item patient-rated version of the OQ (Lambert et al., 1996). The OQ-45 was designed to measure patient progress over the course of therapy and includes three areas of functioning, including how the person feels inside (subjective discomfort, e.g., anxiety and depression: 'I feel blue'), how he or she is getting along with significant others (interpersonal relationships, e.g., 'I feel lonely') and how he or she is doing in important life tasks, such as work and school (social role performance, e.g., 'I have too many disagreements at work/school'). Possible scores range from 0 to 180, with higher scores representing greater severity of distress. A sum score was calculated to achieve a total psychological functioning score. The OQ-45 is a psychometrically sound measure with internal consistency reported to be .93 and test-retest reliability reported to be .84 (Lambert et al., 1996). The internal reliability level of the total OQ score in the present study was good, with Cronbach's alpha of .90.

2.6 | Data analysis

The data were screened for accuracy, missing values and outliers (Cohen et al., 2014). Approximately 14.20% of the responses for any variable reflected missing data. This percentage of missing is within the accepted range in naturalistic data. Outliers were identified using the boxplot method and *z* score values that were more than 3 standard deviations away from the mean for the total sample. No outliers were identified. The associations between the patient reported WAI and PEAR and OQ were tested using multilevel modelling (MLM) with observations nested within patients. All variables were standardized before entering the models.

To address our first and second research question, MLM was applied. Data were hierarchically nested with assessments within

patients and patients within therapists. To account for interdependence, and to prevent inflation of the non-independence effects (Krul & MacKinnon, 2001; Laurenceau & Bolger, 2012), SAS PROC MIXED procedure was utilized, with Level 1 as the assessment level, Level 2 as the patient level and Level 3 at the therapist level. Intra-class correlations (ICCs) were used to measure the amount of unexplained variance in predicting psychological functioning (OQ) due to random effects of the therapist and patient. ICCs were calculated using the output based on a model with a random intercept of the patient and the therapist.

To examine whether patients' psychological functioning throughout the course of treatment is predicted general experience (between-patients differences) and specific fluctuations (within-patient differences) in patients' reported (a) working alliance (WAI) and (b) attunement (PEAR), two models were conducted; the first predicted patients' psychological functioning by patients' general experience and specific fluctuations of the working alliance, while controlling for patients' psychological functioning at the previous assessment. The second predicted patients' psychological functioning by patients' general experience and specific fluctuations of the experienced attunement, while controlling for psychological functioning at the previous assessment.

To disentangle general experience and specific fluctuations of working alliance, we followed the recommendations of Wang and Maxwell (2015). We used the individual patient's mean of patientreported working alliance for patients' general experience (betweenpatients effect) and centred the patient-reported working alliance within the individual patient's mean the specific fluctuations of experienced alliance (within-patient effect). This procedure yielded independent coefficients for between-patients and within-patient effects (Bolger & Laurenceau, 2013). Using this approach to disaggregate the general and specific fluctuations of experienced working alliance, we examined the two alliance components simultaneously as predictors, in a combined model. To establish a correct temporal relationship between patient-reported working alliance and psychological functioning, we introduced the within-patient experience of alliance at a given session (time T) as a predictor of psychological functioning at time the measurement 1 month later (T + 1), while controlling for psychological functioning at the first measurement (time T).

To examine the effect of patient-reported attunement and responsiveness on psychological functioning, we repeated the same model with attunement replacing working alliance in the model. To enable a lag effect that is similar in duration across patients, only a lag of a minimum of 15 days and maximum of 45 days was used.

3 | RESULTS

3.1 | Preliminary analyses

On average, the patients reported a relatively strong working alliance ($M=50.31;\ SD=7.10$) and high levels of attunement and

TABLE 1 Correlations of attunement, working alliance and psychological functioning in our treatment sample (N = 173)

	PEAR	WAI-SF	OQ-45
PEAR	1	-	-
WAI-SF	.73***	1	-
OQ-45	18***	17***	1

Notes: Correlations are represented by beta coefficient (standardized) based on MLM.

Abbreviations: OQ-45, Outcome Questionnaire-45; PEAR, Patients' Experiences of Attunement and Responsiveness; WAI-SF, Working Alliance Inventory-Short Form.

responsiveness by their therapist (M = 53.15; SD = 6.64) and moderate levels (M = 61.64; SD = 22.36) of psychological problems across time points.

The patient-reported experienced level of attunement and responsiveness, as measured by the PEAR, correlated highly with the WAI, as well as with the patients' level of psychological functioning throughout treatment. See Table 1 for an overview of the relevant correlations. Based on the zero-order correlations, a total of 53% (R^2) of the variance in PEAR can be explained by the WAI, and 47% (R^2) of the variance in PEAR is unique, suggesting the significance of studying these two constructs separately.

3.2 | Predicting psychological functioning

The estimated variance of the patient's random effect in the three-level model predicting psychological functioning was significant, indicating that the patient's random effects contributed significantly to the variance in their psychological functioning (p < .0001). The ICC for the patient's random effect was 81.52%. No random effects were found in the therapists (p = 1).

Patients' general experience of the working alliance (between-patient effect) did not predict the level of psychological functioning throughout treatment (b=0.05, SE=0.15, p=.73). Nevertheless, specific fluctuations in patient's reported working alliance (within-patient effect) was significant (b=0.63, SE=0.25, p=.014, $R^2=.009$), indicating that when patients report higher alliance relative to their general, underlying level of alliance, their psychological functioning improved at the subsequent assessment.

Similarly, patients' general experience of attunement (between-patient effect) did not predict the level of psychological functioning over the course of treatment (b=-0.02, SE=0.18, p=.91). Nevertheless, specific fluctuations of reported attunement during treatment (within-patient effect) approached significance (b=0.49, SE=0.25, p=.051, $R^2=.006$), indicating that when patients report higher attunement relative to their general, underlying level of experienced attunement, their psychological functioning somewhat improved at the subsequent assessment.

^{*}p < .05. **p < .01. ***p < .0001.

4 | DISCUSSION

In this study, we examined the therapeutic relationship and its subsequent effect on treatment progress in a naturalistic sample of outpatients in a community-based psychotherapy training clinic. We posited that, besides the working alliance, patients' perception of their therapist's attunement and responsiveness might be an additional important aspect of the therapeutic relationship to consider, especially emphasized in theories such as CMT, where patients' individual trauma's, beliefs and goals are pertinent for the case conceptualization and individualized treatment approach. We thus examined patient self-report measures of these two interrelated aspects of the therapeutic relationship: a frequently used measure of the working alliance (WAI) and a newly developed measure of perceived therapists' attunement and responsiveness (PEAR). Moreover, to investigate the potential of the contributions of the therapeutic relationship to subsequent improvement in psychological functioning, we aimed to disentangle between patients' general therapeutic experiences and their specific fluctuations of these experiences during treatment.

Our results suggest that in this patient sample, the general experience of a strong therapeutic relationship (i.e., collaborative working relationship and feeling attuned and responded to) relative to other patients did not appear to contribute to symptomatic change. Instead, the patients' specific fluctuations in working alliance relative to their own general experiences appeared important for subsequent symptomatic change 1 month later. More specifically, the patient's average working alliance score did not predict outcome, but when a patient's working alliance scores increased relative to their average working alliance score in a given session, this predicted an improvement in psychological functioning 1 month later (relative to their previous functioning scores). This same within-patient pattern emerged for the therapeutic relationship variable of attunement and responsiveness, but the relationship with treatment progress did not reach significance.

These reported results on the effect of these therapeutic relationship variables as individual predictors of patients' well-being further suggest that even if patients do not generally tend to experience a good therapeutic relationship with their therapist, when they experience a relative improvement in their working alliance with their therapists, their level of psychological functioning improves in the following month. From a control mastery perspective, the working alliance is probably capturing patients' sense of safety (which fluctuates at a within-patient level) in the relationship.

4.1 | Clinical implications

Our findings indicate that improvements in the therapeutic relationship assessed within patients are more clinically useful than comparisons with the quality of other patients' (between patients) relationships. The working alliance is a dynamic process to some degree and should be measured repeatedly overtime. Particularly, the fluctuation of the patient-reported working alliance over time might

be important for patients' sense of safety in the relationship, and the development of a more collaborative working relationship increases the chances of patients' improvement later in treatment. Other aspects of the therapeutic relationship, such as attunement and responsiveness, might possibly be relevant and warrant further exploration.

This suggests that tracking the quality of the therapeutic relationship is clinically informative and underlines the importance of routine outcome monitoring in psychotherapy treatments (de Jong et al., 2021). This may be particularly helpful for patients who have difficulty expressing disappointment or unhappiness with therapy or those who are overly compliant. Indeed, Samstag et al. (1998) have pointed out that patients may be reluctant to voice dissatisfaction directly to the therapist in sessions, even though the exploration of such negative feelings might be very therapeutic. There is already a growing and more recent body of literature demonstrating that regular measure-based feedback helps therapists identify ruptures in therapy sessions (Safran et al., 2011), increases patient retention and enhances treatment outcomes (see Berking et al., 2006; de Jong et al., 2021; Lambert, 2012).

This outpatient sample was treated by therapists in-training within a CMT context. However, the predictive contribution of within-patient change in working alliance to treatment progress likely generalizes across therapists of different levels of experience, because similar patterns of contributions to outcomes have been reported for licensed therapists in a variety of treatment approaches (Falkenström et al., 2016; Strunk et al., 2010; Zilcha-Mano, 2017; Zilcha-Mano et al., 2016). Thus, trainee therapists and seasoned therapists alike might benefit from training in how to facilitate a strong working alliance, such as Facilitative Interpersonal Relational Skills Training (FIRST; e.g., Anderson et al., 2016) and Alliance-Focused Trainings (AFTs; Eubanks-Carter et al., 2015) to learn to identify ruptures in the working alliance as well as opportunities for attunement and repair.

4.2 | Strengths, limitations and future research

This study had several methodological strengths. We conducted naturalistic treatment outcome research in a clinic setting where we tracked process and outcome periodically, and we obtained a large sample size (N=173). We also sought to tease apart fluctuations in the two measures from 'general' mean scores.

However, our study was also limited in the following ways. First, although our naturalistic sample of patients and therapists was representative for this CMT training clinic, most patients were highly educated, heterosexual and Caucasian. It is possible that some of these therapeutic relationship experiences are different in different cultural groups. Also, the naturalistic sample was 'messy' in that some therapists participated with just one patient, whereas others participated with several patients, and patient–therapist dyads entered the study at varying points during the course of therapy. For example, some dyads entered the study after their second session, whereas some dyads entered the study after having been in therapy for several

months. This is significant because research is mixed with regard to the way in which the working alliance develops and changes over the course of therapy (Bachelor & Salamé, 2000), including studies that suggest a linear increase or a stagnant line over time (Greenberg, 1994) or a *U*-shaped pattern of working alliance change (Gelso & Carter, 1994; Horvath & Marx, 1990). Another consequence of this naturalistic data-collection was that outcome measures were only completed once a month (once in four sessions) rather than every session. In community practices of long-term therapy, it is common practice to gather therapeutic data at every month instead of every session (Jensen-Doss et al., 2018), but it does mean that the progress within these weeks was not captured.

Also, it is important to note that the WAI and PEAR scores were both relatively high and had a very constricted range. It is possible that therapists in this sample, who were trained and supervised in CMT, were generally very collaborative in their working alliance and very attuned and responsive to their patients (Silberschatz, 2021). Although these relatively high ratings are likely a sign of a good therapeutic relationship, they also illustrate a likely ceiling effect, a frequently reported limitation of self-report measures of the therapeutic relationship (Baldwin et al., 2007). Both scales of the therapeutic relationship are more clinically useful when they can pick up moments of disruption in the working alliance and attunement. Future studies, using broader clinical samples, with more diverse therapists with different levels of training and training backgrounds are warranted.

Moreover, the self-report nature of the scales limited the study in several ways. First, the fact that both therapeutic relationship measures were self-reported means that limited method variance might explain part of the high correlations between these measures. Second, the therapeutic relationship, including working alliance and attunement and responsiveness, is complex, dynamic and more nuanced than existing self-report measures reflect (Stiles & Goldsmith, 2010). It is possible that attunement and responsiveness-more than the sense of agreement measured in the working alliance-might reflect an unconscious relational dynamic that is difficult to assess fully with self-report measures, especially due to its unconscious dynamic elements, and its nuances and case-specific qualities. The PEAR, as a measure of attunement and responsiveness, might need to be refined to further strengthen the operationalization of the conceptually unique and clinically relevant aspects of the therapeutic relationship it aims to capture. If the PEAR were to predict treatment progress, future research in other outpatient settings could test the prediction of psychological functioning when both the WAI and PEAR are in the same predictive model. This would then clarify if the PEAR explained additional variance in psychological functioning, above and beyond the prediction of the WAI.

Relatedly, a measure of the perceived level of therapists' attunement and responsiveness to the patient, like the PEAR, may potentially have some value in predicting treatment engagement. Empirical research could, for example, include session-by-session measures of patients' therapeutic agency or therapists' therapeutic presence to elucidate the immediate in-session effects of a therapists' increased attunement to the patient. Also, future research could examine if and

how much the percentage of pro-plan intervention use per session (Silberschatz, 2017), or the average level of pro-planfulness per session correlates with the perceived levels of attunement and responsiveness.

Alternatively, an observer-rated or computer-based measure of the moment-to-moment fluctuations might be better suited to capture the relational dynamic aspect of the therapeutic relationship. For example, future research that includes tracking facial expressions and physiological measures of change might give an additional perspective on attunement between therapist and patient. Given the complex nature of within-patient differences in therapeutic interactions, nested within patients and nested within therapists to predict treatment outcome, a possible future application is the use of machine learning (Aafjes-van Doorn et al., 2020). Besides these advanced statistical analyses, qualitative research and mixed methods approaches also have much to offer, with case studies providing a more individualized way of examining global psychotherapy process patterns (Stiles & Goldsmith. 2010).

4.3 | Conclusion

The therapeutic relationship between a patient and therapist involves several components. Although the working alliance has been examined widely and has shown to be predictive of treatment outcome, attunement and responsiveness has only recently received research attention. Arguably, the construct of attunement and responsiveness more clearly reflects the dynamic aspect of the therapeutic relationship and the responsibility of the therapist. It is the therapists' task to understand the patients' needs in the moment and to continuously negotiate with and adapt to the individual patient.

When we disentangled the between and within-patient changes in these therapeutic relationship variables, we found that, from a patient's perspective, an increase in working alliance with their therapist, relative to their general level of experience with this therapist, is more important than comparisons with other patients' levels of reported working alliance. This suggests that the tracking of the working alliance is clinically very informative, and further research on feedback and training in therapists' capacity to facilitate the working alliance might be warranted. The measure of the PEAR, designed to capture the patients' perception of the therapist's level of attunement and responsiveness, might require further refinement to be able to capture a complementary aspect of the therapeutic relationship.

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CONFLICT OF INTEREST

All authors declare that they have no conflicts of interest.

COMPLIANCE WITH ETHICAL STANDARDS

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all patients for being included in the study. Informed consent was obtained from all individual participants included in the study.

DATA AVAILABILITY STATEMENT

Data are available upon request.

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REFERENCES

- Aafjes-van Doorn, K., Kamsteeg, C., Bate, J., & Aafjes, M. (2020). A scoping review of machine learning in psychotherapy research. *Psychotherapy Research*, 31, 92–116. https://doi.org/10.1080/10503307.2020. 1808729
- Alexander, F., & French, T. M. (1980). Psychoanalytic Therapy: Principles and Application. John Wiley and Sons.
- Anderson, T., Crowley, M. E. J., Himawan, L., Holmberg, J. K., & Uhlin, B. D. (2016). Therapist facilitative interpersonal skills and training status: A randomized clinical trial on alliance and outcome. *Psychotherapy Research*, 26(5), 511–529. https://doi.org/10.1080/10503307. 2015.1049671
- Bacal, H. A. (1985). Optimal responsiveness and the therapeutic process. In A. Goldberg (Ed.), Progress in Self Psychology (Vol. 1, pp. 202–227). The Guilford Press.
- Bachelor, A., & Salamé, R. (2000). Participants' perceptions of dimensions of the therapeutic alliance over the course of therapy. The Journal of Psychotherapy Practice and Research, 9(1), 39–53.
- Baldwin, S. A., Wampold, B. E., & Imel, Z. E. (2007). Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting* and Clinical Psychology, 75(6), 842–852. https://doi.org/10.1037/0 022-006X.75.6.842
- Beck, A. T., & Steer, R. A. (1993). BAI Beck Anxiety Inventory Manual. The Psychological Corporation.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck Depression Inventory-II. Psychological Corporation. https://doi.org/10.1037/ t00742-000
- Beebe, B., & Lachmann, F. M. (2002). Infant research and adult treatment. In *Co-Constructing Interactions*. The Analytic Press. https://opus4.kobv.de/opus4-Fromm/frontdoor/index/index/docld/27410
- Berking, M., Orth, U., & Lutz, W. (2006). How effective is systematic feed-back of treatment progress to the therapist? An empirical study in a cognitive-behavioural-oriented impatient setting. Zeitschrift Fur Klinische Psychologie Und Psychotherapie, 35(1), 21–29. https://doi.org/10.1026/1616-3443.35.1.21
- Bolger, N., & Laurenceau, J.-P. (2013). Intensive Longitudinal Methods: An Introduction to Diary and Experience Sampling Research. The Guilford Press.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252–260. https://doi.org/10.1037/h0085885
- Boritz, T., Varma, S., Macaulay, C., & McMain, S. F. (2021). Alliance rupture and repair in early sessions of dialectical behavior therapy: The case of Rachel. *Journal of Clinical Psychology*, 77(2), 441–456. https://doi.org/ 10.1002/jclp.23101
- Bugas, J., & Silberschatz, G. (2000). How patients coach their therapists in psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 37(1), 64–70. https://doi.org/10.1037/h0087676

- Bush, M., & Meehan, W. (2011). Should supportive measures and relational variables be considered a part of psychoanalytic technique? Some empirical considerations. *The International Journal of Psychoanalysis*, 92(2), 377–399. https://doi.org/10.1111/j.1745-8315.2011.
- Castonguay, L. G., Boswell, J. F., Zack, S. E., Baker, S., Boutselis, M. A., Chiswick, N. R., Damer, D. D., Hemmelstein, N. A., Jackson, J. S., Morford, M., Ragusea, S. A., Gowen, J., Spayd, C., Weiszer, T., Borkovec, T. D., & Holtforth, M. G. (2010). Helpful and hindering events in psychotherapy: A practice research network study. *Psychotherapy: Theory, Research, Practice, Training*, 47(3), 327–344. https://doi.org/10.1037/a0021164
- Cohen, P., West, S. G., & Aiken, L. S. (2014). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Psychology Press. https://doi.org/10.4324/9781410606266
- Constantino, M. J., & Westra, H. A. (2012). An expectancy-based approach to facilitating corrective experiences in psychotherapy. In *Transformation in Psychotherapy: Corrective Experiences Across Cognitive Behavioral, Humanistic, and Psychodynamic Approaches* (pp. 121–139).
 American Psychological Association. https://doi.org/10.1037/13747-008
- Coyne, A. E., Constantino, M. J., Gaines, A. N., Laws, H. B., Westra, H. A., & Antony, M. M. (2021). Association between therapist attunement to patient outcome expectation and worry reduction in two therapies for generalized anxiety disorder. *Journal of Counseling Psychology*, 68(2), 182–193. https://doi.org/10.1037/cou0000457
- Crits-Christoph, P., Gibbons, M. B. C., Hamilton, J., Ring-Kurtz, S., & Gallop, R. (2011). The dependability of alliance assessments: The alliance–outcome correlation is larger than you might think. *Journal of Consulting and Clinical Psychology*, 79(3), 267–278. https://doi.org/10.1037/a0023668
- Curtis, J., & Silberschatz, G. (2005). The Assessment of Pathogenic Beliefs. In Transformative Relationships: The Control-Mastery Theory of Psychotherapy (pp. 69–91). Routledge.
- de Jong, K., Conijn, J. M., Gallagher, R. A. V., Reshetnikova, A. S., Heij, M., & Lutz, M. C. (2021). Using progress feedback to improve outcomes and reduce drop-out, treatment duration, and deterioration: A multilevel meta-analysis. Clinical Psychology Review, 85, 102002. https://doi.org/10.1016/j.cpr.2021.102002
- Doran, J. M. (2016). The working alliance: Where have we been, where are ww going? *Psychotherapy Research*, 26(2), 146–163. https://doi.org/10.1080/10503307.2014.95415
- Elkin, I., Falconnier, L., Smith, Y., Canada, K. E., Henderson, E., Brown, E. R., & Mckay, B. M. (2014). Therapist responsiveness and patient engagement in therapy. *Psychotherapy Research*, 24(1), 52–66. https://doi.org/10.1080/10503307.2013.820855
- Eubanks, C. F., Sergi, J., Samstag, L. W., & Muran, J. C. (2021). Commentary: Rupture repair as a transtheoretical corrective experience. *Journal of Clinical Psychology*, 77(2), 457–466. https://doi.org/10.1002/jclp. 23117
- Eubanks-Carter, C., Muran, J. C., & Safran, J. D. (2015). Alliance-focused training. Psychotherapy, 52(2), 169–173. https://doi.org/10.1037/ a0037596
- Falkenström, F., Ekeblad, A., & Holmqvist, R. (2016). Improvement of the working alliance in one treatment session predicts improvement of depressive symptoms by the next session. *Journal of Consulting* and Clinical Psychology, 84(8), 738–751. https://doi.org/10.1037/ ccp0000119
- Falkenström, F., Granström, F., & Holmqvist, R. (2013). Therapeutic alliance predicts symptomatic improvement session by session. *Journal of Counseling Psychology*, 60(3), 317–328. https://doi.org/10.1037/ccp0000594
- Flückiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. *Psychotherapy*, 55(4), 316–340. https://doi.org/10.1037/pst0000172

- Flückiger, C., Rubel, J., Del Re, A. C., Horvath, A. O., Wampold, B. E., Crits-Christoph, P., Atzil-Slonim, D., Compare, A., Falkenström, F., Ekeblad, A., & Errázuriz, P. (2020). The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis. *Journal of Consulting and Clinical Psychology*, 88(9), 829-843. https://doi.org/10.1037/ccp0000594
- Gazzillo, F., De Luca, E., Rodomonti, M., & Fimiani, R. (2019). Through flow and swirls: Modifying implicit relational knowledge and disconfirming pathogenic beliefs within the therapeutic process. Psychoanalytic Psychology, 38(3), 204–215. https://doi.org/10.1037/pap0000281
- Gazzillo, F., Genova, F., Fedeli, F., Curtis, J. T., Silberschatz, G., Bush, M., & Dazzi, N. (2019). Patients unconscious testing activity in psychotherapy: A theoretical and empirical overview. *Psychoanalytic Psychology*, 36(2), 173–183. https://doi.org/10.1037/pap0000227
- Gelso, C. (2014). A tripartite model of the therapeutic relationship: Theory, research, and practice. *Psychotherapy Research*, 24(2), 117–131. https://doi.org/10.1080/10503307.2013.845920
- Gelso, C. J., & Carter, J. A. (1994). Components of the psychotherapy relationship: Their interaction and unfolding during treatment. *Journal of Counseling Psychology*, 41(3), 296–306. https://doi.org/10.1037/0022-0167.41.3.296
- Greenberg, L. S. (1994). What is "real" in the relationship? Comment on Gelso and Carter (1994). *Ournal of Counseling Psychology*, 41(3), 307–309. https://doi.org/10.1037/0022-0167.41.3.307
- Hatcher, R. L. (2015). Interpersonal Competencies: Responsiveness, Technique, and Training in Psychotherapy. American Psychologist, 70(8), 747–757. https://doi.org/10.1037/a0039803
- Hatcher, R. L., & Gillaspy, J. A. (2006). Development and validation of a revised short version of the working alliance inventory. *Psychotherapy Research*, 16(1), 12–25. https://doi.org/10.1080/105033005003 52500
- Håvås, E., Svartberg, M., & Ulvenes, P. (2015). Attuning to the unspoken: The relationship between therapist nonverbal attunement and attachment security in adult psychotherapy. *Psychoanalytic Psychology*, 32(2), 235–254. https://doi.org/10.1037/a0038517
- Horvath, A. O., & Greenberg, L. (1986). The Development of the Working Alliance Inventory: A Research Handbook.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology*, 36(2), 223–233. https://doi.org/10.1037/0022-0167.36.2.223
- Horvath, A. O., & Marx, R. W. (1990). The development and decay of the working alliance during time-limited counselling. Canadian Journal of Counselling and Psychotherapy, 24(4), 240–260.
- Jensen-Doss, A., Smith, A. M., Becker-Haimes, E. M., Mora Ringle, V., Walsh, L. M., Nanda, M., Walsh, S. L., Maxwell, C. A., & Lyon, A. R. (2018). Individualized progress measures are more acceptable to clinicians than standardized measures: Results of a National Survey. Administration and Policy in Mental Health and Mental Health Services Research, 45(3), 392–403. https://doi.org/10.1007/s10488-017-0833-y
- Krul, J. L., & MacKinnon, D. P. (2001). Multilevel modeling of individual and group level mediated effects. *Multivariate Behavioral Research*, 36(2), 249–277. https://doi.org/10.1207/S15327906MBR3602_06
- Lambert, M. J. (2012). Helping clinicians to use and learn from research-based systems: The OQ-analyst. *Psychotherapy*, 49(2), 109–114. https://doi.org/10.1037/a0027110
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 357–361. https://doi.org/10.1037/0033-3204.38.4.357
- Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersch, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the outcome questionnaire. *Clinical Psychology & Psychotherapy*, 3(4), 249–258. https://doi.org/10.1002/(SICI)1099-0879(199612)3:4<249::AID-CPP106>3.3.CO;2-J

- Laurenceau, J.-P., & Bolger, N. (2012). Analyzing diary and intensive longitudinal data from dyads. In M. Mehl & T. S. Conner (Eds.), Handbook of Research Methods for Studying Daily Life (pp. 407–422). The Guilford Press.
- Mesman, J., van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2009). The many faces of the still-face paradigm: A review and metaanalysis. *Developmental Review*, 29(2), 120–162. https://doi.org/10. 1016/j.dr.2009.02.001
- Norcross, J. C., & Lambert, M. J. (2011). Psychotherapy relationships that work II. Psychotherapy, 48(1), 4–8. https://doi.org/10.1037/ a0022180
- Safran, J. D., Muran, J. C., & Eubanks-Carter, C. (2011). Repairing alliance ruptures. Psychotherapy, 48(1), 80–87. https://doi.org/10.1037/ a0022140
- Sampson, H. (1992). The role of "real"; experience in psychopathology and treatment. Psychoanalytic Dialogues, 2(4), 509–528. https://doi.org/ 10.1080/10481889209538948
- Sampson, H. (2005). Treatment by Attitudes. In G. Silberschatz (Ed.), Transformative Relationships: The Control-Mastery Theory of Psychotherapy (pp. 111–119). Routledge.
- Samstag, L. W., Batchelder, S. T., Muran, J. C., Safran, J. D., & Winston, A. (1998). Early identification of treatment failures in short-term psychotherapy: An assessment of therapeutic alliance and interpersonal behavior. The Journal of Psychotherapy Practice and Research, 7(2), 126–143.
- Silberschatz, G. (2005). Transformative Relationships: The Control Mastery Theory of Psychotherapy: The Control Mastery Theory of Psychotherapy. Routledge. http://books.google.com/books?hl=en&lr=&id=M_pxuiAu R24C&oi=fnd&pg=PA5&dq=silberschatz&ots=uWC56_OOS2&sig= JhQ3B dR6tmw2pf0V4u-rxdOOg8
- Silberschatz, G. (2009). The patients experience of attunement and responsiveness scale (Unpublished manuscript).
- Silberschatz, G. (2010). The control-mastery perspective: A clinical formulation of Davids plan. *Journal of Psychotherapy Integration*, 20(1), 81–88. https://doi.org/10.1037/a0018888
- Silberschatz, G. (2017). Improving the yield of psychotherapy research. *Psychotherapy Research*, *27*(1), 1–13. https://doi.org/10.1080/10503 307.2015.1076202
- Silberschatz, G. (2021). Responsiveness in control mastery theory. In J. C. Watson & H. Wiseman (Eds.), The Responsive Psychotherapist: Attuning to Clients in the Moment (pp. 133–150). American Psychological Association. https://doi.org/10.1037/0000240-007
- Silberschatz, G., & Sampson, H. (1991). Affects in psychopathology and psychotherapy. In J. D. Safran & L. S. Greenberg (Eds.), *Emotion, Psychotherapy, and Change* (pp. 113–129). The Guilford Press.
- Snyder, J., & Silberschatz, G. (2017). The patients experience of attunement and responsiveness scale. *Psychotherapy Research*, 27(5), 608–619. https://doi.org/10.1080/10503307.2016.1147658
- Stiles, W. B. (2009). Responsiveness as an obstacle for psychotherapy outcome research: It's worse than you think. *Clinical Psychology: Science and Practice*, 16(1), 86–91. https://doi.org/10.1111/j.1468-2850. 2009.01148.x
- Stiles, W. B., & Goldsmith, J. Z. (2010). The alliance over time. In J. C. Muran & J. P. Barber (Eds.), The Therapeutic Alliance: An Evidence-Based Guide to Practice (pp. 44–62). The Guilford Press.
- Stiles, W. B., Honos-Webb, L., & Surko, M. (1998). Responsiveness in psychotherapy. *Clinical Psychology: Science and Practice*, *5*(4), 439–458. https://doi.org/10.1111/j.1468-2850.1998.tb00166.x
- Stiles, W. B., & Horvath, A. O. (2017). Appropriate responsiveness as a contribution to therapist effects. In L. G. Castonguay & C. E. Hill (Eds.), How and Why Are Some Therapists Better Than Others?: Understanding Therapist Effects (pp. 71–84). American Psychological Association. https://doi.org/10.1037/0000034-005
- Strunk, D. R., Brotman, M. A., & DeRubeis, R. J. (2010). The process of change in cognitive therapy for depression: Predictors of early

- inter-session symptom gains. *Behaviour Research and Therapy*, 48(7), 599-606. https://doi.org/10.1016/j.brat.2010.03.011
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1(3), 207–210. https://doi.org/10.1037/1040-3590.1.3.207
- Wang, L. P., & Maxwell, S. E. (2015). On disaggregating between-person and within-person effects with longitudinal data using multilevel models. *Psychological Methods*, 20(1), 63–83. https://doi.org/10.1037/ met0000030
- Weiss, J. (1993). How Psychotherapy Works: Process and Technique. Guilford Press. https://books.google.com/books?hl=en&lr=&id=DUF seV60TAMC&oi=fnd&pg=PA1&dq=therapy+process+Weiss&ots=WUCnjXD4ZD&sig=Y2ym3QTNKKexpqPnqylqcD7qqSg
- Xu, H., & Tracey, T. J. (2015). Reciprocal influence model of working alliance and therapeutic outcome over individual therapy course. *Journal of Counseling Psychology*, 62(3), 351–359. https://doi.org/10.1037/cou0000089
- Zilcha-Mano, S. (2017). Is the alliance really therapeutic? Revisiting this question in light of recent methodological advances. *American Psychologist*, 72(4), 311–325. https://doi.org/10.1037/a0040435
- Zilcha-Mano, S., Dinger, U., McCarthy, K. S., & Barber, J. P. (2014). Does alliance predict symptoms throughout treatment, or is it the other way around? *Journal of Consulting and Clinical Psychology*, 82(6), 931–935. https://doi.org/10.1037/a0035141
- Zilcha-Mano, S., & Errázuriz, P. (2015). One size does not fit all: Examining heterogeneity and identifying moderators of the alliance-outcome

- association. Journal of Counseling Psychology, 62(4), 579–591. https://doi.org/10.1037/cou0000103
- Zilcha-Mano, S., Muran, J. C., Hungr, C., Eubanks, C. F., Safran, J. D., & Winston, A. (2016). The relationship between alliance and outcome: Analysis of a two-person perspective on alliance and session outcome. *Journal of Consulting and Clinical Psychology*, 84(6), 484–496. https://doi.org/10.1037/ccp0000058

ENDNOTE

¹ The therapist also rated the level of attunement and responsiveness and the working alliance that they expected their patients to experience in the session. However, this therapist perspective was not the focus in this study.

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