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#### EMPIRICAL PAPER

## Achieving successful resolution of alliance ruptures: for whom and when?

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#### Abstract

**Objective:** Contemporary theories and the empirical literature stress the importance of successful resolution of alliance ruptures for the process and outcome of treatment. Yet, little empirical work has examined what leads to successful resolutions. The aim of the present study was to examine which patients are more likely to achieve successful resolutions of ruptures and under which circumstances.

**Method:** Sixty-five patients completed measures assessing their trait-like pretreatment characteristics (alliance expectations and general attachment orientation), and state-like changes in treatment (working alliance, therapist serving as an attachment figure, and the implementation of common factor techniques). Successful resolutions were coded using observer behavioral coding at four time points.

**Results:** State-like changes, but not trait-like characteristics significantly contributed to successful resolution. Stronger working alliance and the therapist as an attachment figure, and the implementation of common factors techniques were found to contribute to successful resolutions.

**Conclusions:** The current findings emphasize the importance of the process that occurs within treatment, and the therapeutic context in which the resolution process take place for the ability to achieve successful resolutions.

Keywords: alliance; rupture and resolution; successful resolutions; process; treatment

Clinical or methodological significance of this article: The current study emphasizes the importance of the process that occurs within treatment, and the therapeutic context in which the resolution process takes place, for the ability to achieve successful resolutions. It might be suggested that therapists should be attuned to the context in which the resolution process takes place and assess accordingly what are the effective techniques that can contribute to successful resolutions in a specific dyad.

Over the years, the therapeutic alliance has received a great deal of empirical and clinical attention (Flückiger et al., 2018). The therapeutic alliance is commonly defined as the emotional bond between patient and therapist, the agreement between them on the goals of treatment, and their collaboration on the tasks of treatment (Bordin, 1979; Hatcher & Barends, 2006). Empirically, the therapeutic alliance has been found to be a consistent predictor of

outcome in therapy, irrespective of differences in therapeutic orientations (Flückiger et al., 2018). Whereas the first two decades of alliance empirical research focused on establishing the alliance-outcome association (Horvath, 2001), the second generation of alliance research seeks to understand the ways in which alliance affects treatment outcome, focusing among others on the resolution of alliance ruptures (Safran & Muran, 2006).

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Alliance ruptures are an integral part of treatment. and have been identified in 91%-100% of sessions (Muran, 2019). A rupture is defined as deterioration or tension in the alliance. It manifests as a break in therapy or a minor tension between patient and therapist in the components of the alliance (Safran et al., 2011; Safran & Muran, 2006). Ruptures may be categorized into two main subtypes: withdrawal and confrontational ruptures (Eubanks-Carter et al., 2015; Safran & Muran, 2000). The resolution strategies differ in how complex and fundamental they are. Some resolutions include immediate strategies that seek to repair the rupture forthwith, whereas others focus on exploring the rupture and what underlies it (Eubanks et al., 2018). It has been suggested that resolution is successful when the patient and therapist resume collaborating on the work of therapy with a strong affective bond (Eubanks et al., 2018).

Empirical research and clinical work support the important role of successful resolution of alliance ruptures in treatment. A recent meta-analysis revealed a significant, moderate size relation between rupture-resolution processes and better treatment outcomes (Eubanks et al., 2018), and higher levels of successful resolution were associated with a lower risk of treatment dropout (Eubanks et al., 2019). Additionally, a case study comparing the therapeutic process of two minority patients illustrated that the patient who achieved successful resolution had better treatment outcomes than the patient who had unsuccessful resolutions (Dolev et al.,

Despite the clinical importance of successful resolution, little is known for whom and when ruptures are likely to be successfully resolved. Two main questions may contribute to the current literature (a) What are the characteristics of patients who achieve successful resolutions; that is, which pretreatment trait-like characteristics contribute to more successful resolutions? (b) Under which circumstances are successful resolutions more likely to be achieved; that is, which state-like changes in treatment precede a more successful resolution of ruptures? Our use of the term patient contribution refers to the patient's contribution within the dyad.

Recent advances made it possible to separate the two components, to trait-like (i.e., for whom) and state-like (i.e., when), each theorized to play a key role in treatment (Zilcha-Mano, 2016). The traitlike component refers to the way in which trait-like characteristics of the patient, such as their ability to form satisfying relationships with others, may contribute to their ability to create, in treatment, the environment required to conduct any effective treatment. By contrast, the state-like component refers to the way in which state-like session characteristics (i.e., changes within the session) may contribute to the therapeutic process, and may indicate what kinds of session characteristics contribute to successful resolution (Zilcha-Mano, 2017; Zilcha-Mano, Muran, et al., 2018).

The first question asks whether specific patients' trait-like pretreatment characteristics contribute to successful resolution. Theoretically, it can be assumed that the patient's interpersonal abilities may contribute to their capacity to collaboratively resolve ruptures (either initiated by the therapist or by the patient). According to recent literature, patients' pre-treatment characteristics, such as interpersonal functioning, personality pathology, object relations, and attachment style, contribute to the working alliance (Sharpless et al., 2010). Pretreatment interpersonal functioning, such as attachment style, was also found to correlate with other similar concepts to successful resolutions, such as the occurrence of immediacy and corrective emotional experience (Hill et al., 2014; Huang et al., 2016; Kuutmann & Hilsenroth, 2012) The literature focusing on ruptures suggests that patient characteristics may contribute to the intensity and the occurrence of ruptures during the session (Eubanks et al., 2018). For example, empirical research found that patients with pre-treatment personality disorders exhibited a higher intensity of ruptures during treatment than did those without such disorders (Tufekcioglu et al., 2013). Based on the literature above, it is reasonable to assume that the patient's pre-treatment characteristics may contribute to the levels of successful resolutions.

Certain trait-like characteristics of the patient such as alliance expectations and general attachment orientation, may be especially promising candidates for predicting the successful resolution of ruptures. Alliance expectations reflect the patient's general expectations regarding relationships and were found to predict a substantial part of the alliance with the therapist (Barber et al., 2014). General attachment orientation may affect the patient's ability to share their feelings openly and be exposed in the relationship with the therapist and was found to predict higher levels of successful resolutions (Miller-Bottome et al., 2019), incidence and intensity of ruptures (Eames & Roth, 2000), and the working alliance (Bernecker et al., 2014; Diener & Monroe, 2011).

The second question asks whether certain statelike changes have occurred in the course of treatment, which may indicate a higher likelihood of achieving successful resolution of ruptures. It is reasonable to assume that the presence of a strong alliance and therapist as an attachment figure create

fertile ground for successful resolution, as do certain techniques used in the session, which may also lead to successful resolution of ruptures. A recent study that examined in-treatment predictors of successful resolutions found that, when therapists were less neglectful of their patients, and patients were less avoidant and followed the therapists' direction, more successful resolution occurred (Eubanks et al., 2019).

Certain state-like changes in treatment, such as the working alliance, may be especially promising candidates for predicting successful resolution of ruptures, for example, the strength of the working alliance between patients and therapists. A strong working alliance is associated with more successful resolution of ruptures (Coutinho et al., 2014). Another statelike change over the course of treatment that may predict successful resolution of ruptures is the extent to which the therapist serves as an attachment figure. A recent meta-analysis suggests that secure attachment to the therapist correlates positively with the working alliance, as compared to avoidant attachment to the therapist which correlates negatively with working alliance (Mallinckrodt & Jeong, 2015). A third state-like change in treatment likely to predict the successful resolution of ruptures concerns the techniques used during the session. One of the methods the therapist may use to successfully manage the resolution of alliance ruptures is to convey an affirming, understanding, and nurturing stance, and to validate the patient by exploring the patient's experience (Safran & Muran, 2000). These recommendations support previous findings that therapist behaviors, such as depth, interest, affirmation, and understanding (i.e., common factors), have a positive influence on the therapeutic alliance, and, as suggested by Ackerman and Hilsenroth (2003), may be helpful in identifying and resolving ruptures in the alliance.

To sum up, the present study sought to address two main questions: (a) Can trait-like characteristics of patients predict higher levels of successful resolution, specifically higher alliance expectations and lower levels of anxious or avoidant general attachment orientation? (b) Can state-like changes in treatment predict successful resolution levels over the course of treatment? We divided the second question into two parts: First, does the presence of a strong alliance and the therapist as an attachment figure contribute to higher levels of successful resolution. Specifically, does a stronger working alliance and the therapist serving to a greater extent as an attachment figure at the previous session contribute to higher levels of successful resolutions at the next session? And second, does the implementation of therapeutic techniques, specifically more extensive

use of common factors techniques during the session, contribute to higher levels of successful rupture resolution in psychodynamic treatment? By examining these questions, we intend to expand the understanding of what characterizes patients who are more likely to achieve successful resolutions, and the circumstances under which they are likely to achieve them.

#### Method

#### **Participants**

Participants in the study were part of the training and active phases of an ongoing randomized controlled trial (RCT) involving supportive-expressive therapy (SET) for depression, conducted in the University of Haifa (Zilcha-Mano, Dolev, et al., 2018). Participants who met the inclusion and exclusion criteria of the study were randomly assigned to supportive- or expressive-focused treatment (SE; Luborsky, 1984; Luborsky et al., 1995). Assignment to the treatment arm was conducted by a third-party institution, not involved in the study, the Biostatistics Department of the Gertner Institute for Epidemiology and Health Policy Research.

Sixty-five patients between the ages of 18-60, with major depressive disorder, from the pilot and the main trial phases of an RCT participated in the current study. Forty participants (61.5%) were women. The average age of the participants was 32 years (SD=8.9). Seventy-two percent were single, 24.3% were married or cohabited, 3% were divorced. Eleven percent were high school graduates, 37% had some college education, 24.6% were college graduates, 9.2% had some post-graduate education, and 13.8% had graduate degrees. Twenty-six percent were unemployed. Eighty-one percent were Jewish, 10.7% were Christian, 6.2% were Muslim, and 1.5% were atheist. Sixty-seven percent were diagnosed with one or more personality disorders. The most frequent personality disorders were obsessivecompulsive (44.2%), avoidant (28.3%) and borderline (15.8%).

#### **Therapists**

Eight therapists, with at least five years of expertise in psychodynamic treatment, participated in the study. All had formal training and experience in psychodynamic treatment. The therapists attended a 20-hour training workshop in supportive and expressive techniques before seeing patients, and had weekly supervision throughout the study. The average age of the therapists was 39 years (SD=6.5). Five of the

therapists were female. Therapists had an average of 11 years of clinical experience (SD=6.1). For the current study, the therapists' median caseload was 6.5 (range: 2-18).

#### **Treatment**

Patients received 16 50-min sessions of SET, a timelimited psychodynamic therapy adapted for depression, either in an expressive-focused condition, or in a supportive-focused one. We used comprehensive treatment protocols for SE treatment: the Luborsky manualized treatment (Book, 1998; Luborsky, 1984.; Luborsky et al., 1995). The supportive condition included all supportive techniques detailed in the manual used by Luborsky expressive techniques were proscribed, as detailed in Leibovich et al. (2018).

#### Measures

The Rupture Resolution Rating System (3RS; Eubanks et al., 2015). An observational system for coding rupture markers and resolution. The coders received six months of training with an experienced coder. For the first month, the coders learned the theoretical background; for the next five months, they engaged in practice coding of therapy sessions. Their coding was not used in the present study until they achieved adequate reliability. Throughout the entire coding phase, all coders received weekly supervision to maintain reliability. Each session was coded by a pair of coders, drawn from a pool of 8 undergraduate students in psychology. All coders were blind to the study hypothesis.

To examine ruptures occurrence, ruptures were coded in 5-minute segments: coders detected events of lack of collaboration or tension between patient and therapist while watching the sessions. Identified ruptures were coded as a Confrontation (CF) or Withdrawal (WD), and clarity of the rupture was rated as a check minus (a weak or somewhat unclear example of the marker), a check (a solid example of the marker), or a check plus (a very clear, "textbook" example of the marker). The coded 5minute segments were then aggregated to achieve one overall score for ruptures per patient per session. In the current study, we used a mean of both withdrawal and confrontation ruptures that occurred within the session, as had been used previously (Gersh et al., 2017). Internal consistency for the current study for withdrawal ruptures was ICC (1, 2) = .95 and confrontation ruptures was ICC (1, 2) = .95.

The present study focused on the level of successful resolutions, a one item global rating that assesses the extent to which resolutions occurred across the ruptures in the session. The global rating captures the global sense of the resolution of ruptures in the session and includes the occurrence and repair of rupture side by side. The item was rated on a 5point Likert scale ranging from 1 (Ruptures were not resolved) to 5 (Ruptures were substantially resolved). Internal consistency for the current study for SR was ICC (1, 2) = .90.

Working Alliance Inventory (WAI; Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989). The WAI is a 36-item self-reported measure assessing the therapeutic alliance following the theoretical model proposed by Bordin (1979). Items were rated on a 7-point Likert scale ranging from 1 (Never) to 7 (Always). In the current study we used the 12-item short form of the WAI (Tracey & Kokotovic, 1989) from the patient's perspective. Internal consistency for alliance throughout the treatment was .92.

Following Barber et al. (2014), we also examined patient expectations for the alliance with the therapist, using the WAI before the patient and therapist first met. The following sentence was added to the instructions: "Because you have not yet experienced treatment as part of this study, answer the following questions thinking about how you expect treatment to be." Internal consistency for alliance expectations for patients was .78.

Experience in Close Relationships Scale (ECR; Brennan et al., 1998). The ECR is a 36-item self-reported measure assessing the construct of adult general attachment orientation. The measure examines two primary dimensions: avoidance (i.e., the extent to which people tend to worry about attachment-related concerns, such as the availability and responsiveness of an attachment figure), and anxiety (i.e., the extent to which people are uncomfortable opening up to others and depending on them) (Fraley et al., 2000). Items were rated on a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Internal consistency for avoidance style and anxiety style was .87 and .91, respectively.

Attachment Formation (AF; Fraley & Davis, 1997). AF is a six-item self-reported measure assessing attachment-related functions. The AF closely follows the theoretical model proposed by Bowlby (1969, 1977, 1982), and is based on the three functions an attachment figure should fulfill based on attachment theory: proximity seeking, safe haven, and secure base. Items were rated on a 5-point Likert scale ranging from 1 (Disagree) to 5 (Strongly agree). In the current study, we adapted this measure to examine the development of attachment formation to the therapist, to assess the extent to which the therapist serves as an attachment figure. Internal consistency for attachment formation was .77.

The Multitheoretical List of Therapeutic Interventions (MULTI; McCarthy & Barber, 2009; Solomonov et al., 2019). MULTI is a 30item self-reported measure assessing intervention use from eight therapy orientations (cognitive, behavioral, process-experiential, person-centered, psychodynamic, interpersonal, dialectical-behavioral, and common factors) from the patient perspective. In the present study, we focused only on the common factors subscale. The common factor subscale assesses positive expectations and relationship factors, such as warmth, acceptance, and attunement. The interventions that were coded in the MULTI as common factors subscales are: "My therapist worked to give me hope or encouragement"; "My therapist was warm, sympathetic, and accepting"; "My therapist listened carefully to what I was saying"; "My therapist and I worked together as a team". Items were rated on a 5-point Likert scale, rating each item based on how representative it is of the session they have just completed, on a scale ranging from 1 (Not at all typical of the session) to 5 (Very typical of the session). Internal consistency for the common factors subscale from the patients' perspective was .76.

#### **Procedure**

The complete procedure has been described elsewhere (Zilcha-Mano, Dolev, et al., 2018). Potential patients were recruited by self-referral, based on advertisements. All participants provided written informed consent before joining the study, including the information that all treatment sessions are videotaped, and that they have the right to withdraw from the research at any time. The procedures were approved by the institution's Internal Review Board. Measures were administered at two pretreatment assessment meetings conducted by a research evaluator, and subsequently session by session.

In the present study, we used the 3RS to assess the degree to which ruptures were successfully resolved (SR) at four time points: weeks 2, 4, 6, and 8 (Figure 1). We focused on the early stage of treatment because it is known to be a meaningful and critical stage for changes in treatment (Stulz et al., 2007). To assess trait-like pre-treatment characteristics, patients completed the WAI expectations and the ECR. Patients completed these measures at an intake before meeting the therapist. State-like changes in treatment were measured at two separate time periods: (a) the presence of a strong alliance and therapist as an attachment figure (WAI and AF) was measured the week before assessment of the SR (weeks 1, 3, 5, and 7); (b) the implementation of

therapeutic techniques used during the session (MULTI) was measured at the same session when the SR was examined (weeks 2, 4, 6, and 8). All measures in the study were administered in Hebrew and underwent translation and back translation.

#### **Data Analysis**

The data were hierarchically nested on three levels: assessments nested within patients nested within therapists. To account for the resulting non-independence of assessments, and to prevent inflation of the effects, we added the patient and therapist as random effects using the SAS PROC MIXED procedure for multilevel modeling (Littell et al., 2006). Due to the study design, in which therapists treat several patients, and each patient is treated by one therapist, the patient level includes both patient characteristics and dyad characteristics Baldwin & Imel, 2013). In this study, we referred to the patient and dyadic level as the patient level.

Preliminary data analysis revealed that 3.8% of the data were missing. Additionally, due to a technical problem, we have fewer observations for the attachment formation measure, and therefore the degrees of freedom are not equal. In order to examine the time trends for the SR we evaluated different time trends and found that linear in log of time fixed effect improved the model fit. We further examined the fixed effect and found that SR significantly correlates with log of time. Ruptures were not significantly correlated with time-log in the sample level. Because we used the previous level of SR as a control variable and that the use of autoregressive variable with time log at the same model might be challenging to interpret, we decided to only include the autoregressive variable in our analyses. Due to the small sample size and the concern about collinearity, we examined each predictor in a separate model.

Contribution of patient's trait-like pre-treatment characteristics to successful resolutions. Using the three-level hierarchically nested model described above, we examined whether trait-like components predict SR levels throughout treatment. The trait-like variables are between-patients variables, measured once at pre-treatment; the successful resolution variable is a within-patients variable measured at four time points (sessions 2, 4, 6 and 8). In the first analysis, we examined whether the patient pre-treatment expected WAI (EWAI) predicted the in-session SR level. In the second analysis, we examined whether the patient pre-treatment ECR (avoidance and anxiety) predicted the in-session SR level. We added to all analyses the prior level of successful resolutions as a control variable.

Contribution of state-like changes occurring during the course of treatment to successful resolutions. To examine whether state-like changes in treatment of WAI, AF and MULTI predicted SR levels throughout treatment, we created state-like components for these measures following the recommendations of Raudenbush and Bryk (2002) and Bolger and Laurenceau (2013) and centered all state-like measures around the individual means. To establish correct temporal precedence for session characteristics and the presence of a strong alliance and therapist as an attachment figure (WAI and AF), we examined whether the previous session [T-1] predicted the subsequent SR level (SR [T]) for the next session.

In the first model, we examined the previous session's WAI measure of the patient as a predictor and the next session SR. In the second model, we examined the patient AF measure as a predictor of the next session SR. For the contribution of the implementation of therapeutic techniques, we examined whether the amount of common factor techniques used during the current session (MULTI [T]) predicted the SR level (SR [T]) at the same session. We examined the same-session state-like MULTI common factor techniques for the patient as a predictor of the same-session SR. We added to all analyses the prior level of successful resolutions as a control variable.

To examine effect size, R square marginal and conditional were computed, with R script given in Nakagawa and Schielzeth (2013). Partial eta squared was calculated by the "effectsize" package of R. The analysis was performed by the R Foundation for Statistical Computing, version 3.6.1. Effect size was analyzed individually for each trait-like component: pretreatment EWAI and ECR; and for each of the statelike changes in treatment: WAI, AF and MULTI common factors. Additionally, we repeated all analyses controlling for rupture occurrence and found similar results, except for the attachment formation predictor, which became non-significant (b = .01, SE=.05, t(176) = 1.78 p=.07).

#### **Results**

#### Contribution of Patient Trait-like Pretreatment Characteristics to Successful Resolutions

The effect of patient EWAI on the in-session SR level, was non-significant. The effect of the pre-treatment ECR (avoidance and anxiety) of the patient on the in-session SR level was also non-significant (Table I). These findings indicate that the effect of the pre-treatment expected alliance and attachment

style of the patient did not contribute significantly to predicting successful resolutions (Figure 1).

#### Contribution of State-like Changes Occurring During the Course of Treatment to Successful Resolutions

Contribution of the presence of a strong alliance and therapist as an attachment figure. The effect of the previous session WAI of the patient (WAI [T -1]) on the SR level (SR [T]) throughout treatment was significant (Table I). This indicates that higher levels of WAI from the perspective of the patient at the previous session were associated with higher levels of successful resolutions during the next session. The effect of the previous session patient AF toward the therapist (AF [T-1]) on SR level (SR [T]) throughout treatment was significant (Table I), indicating that the therapist serving as an attachment figure to a greater extent at the previous session was associated with higher levels of successful resolutions during the next session.

Contribution of the implementation of therapeutic techniques used during the session. The effect of the amount of therapeutic techniques used during the session (MULTI [T]) on the same session SR level (SR [T]) throughout treatment was significant (Table I). This indicates that higher levels of common factor techniques used during the session, from the patient's perspective, were associated with higher levels of SR at the same session.

Sensitivity analyses. Sensitivity analyses were employed to examine if the results are general to the occurrence of ruptures or unique to successful resolutions. We found that the associations between all significant predictors and rupture occurrence were non-significant, indicating that these results are unique to successful resolutions.

Post Hoc Analyses. To explore the unique contributions of each of the significant predictors (WAI, AF and MULTI common factors), we used a post hoc analysis to create a model with all the significant predictors (in the same model) to find which remained significant above and beyond the other predictors of successful resolutions. The analysis revealed that WAI remains significant above and beyond the other predictors (b=.33, SE= .15, t(175) = 2.21, p = .02), while attachment formation and MULTI common factors were not significant (b=.06, SE=.06, t(175)=1.02, p=.3; b=.21, SE=.14, t(175) = 1.42, p = .15, respectively). Due to the large number of predictors and that each one can only be interpreted when the others are in the model, this analysis should be interpreted cautiously.

Table I. Predicting Successful Resolutions from Trait-like and State-like Measures.

Predictor Name Fixed Effects	Null Model b (SE) $ p $ [partial $\eta^2$ ]	EWAI b (SE) $ p $ [partial $\eta^2$ ]	ECR Avoidance and Anxiety b (SE) $ p $ [partial $\eta^2$ ]	WAI b (SE) $ p $ [partial $\eta^2$ ]	$\begin{array}{c} \text{AF} \\ \text{b (SE)} \  p  \\ \text{[partial } \eta^2 \text{]} \end{array}$	MULTI Common Factors b (SE) $ p $ [partial $\eta^2$ ]
Intercept	2.88 (.09)	2.88 (.55)	2.74 (.45)	2.92 (.20)	2.66 (.23)	2.84 (.20)
EWAI	p >.001	.001  -0.04 (0.10)  .71  [0]	p >.001	<i>p</i> >.001	p >.001	p >.001
ECR Avoidance			.05 (.07)  .46 [.002]			
ECR Anxiety			07 (.06)  .25  [.005]			
WAI			[.003]	.44 (.12) $ p>.001 $ [.070]		
AF				[.070]	.12 (.06)  .03  [.030]	
MULTI Common Factors					.12 (100) [103] [1030]	.31 (.12)  .01  [.030]
Prior Level of SR		.07 (.06)  .28  [.005]	.07 (.06)  .27  [.005]	01 (.06)  .82  [0]	07 (.07)  .34  [.005]	.013 (.06)  .82  [0]
Random effects	VC	VC	VC	VC	VC	VC
Patient	.097	.063	.050	.143	.076	.109
Therapist	.014	.011	.013	.013	.000	.031
Residual	.914	.939	.941	.831	.989	.886
$R^2$ (marginal)		.005	.015	.048	.032	.025
$R^2$ (conditional)		.078	.077	.199	.101	.141
AIC	719.3	719.7	719.8	707.2	547.4	706.8
BIC	719.6	720.1	720.3	707.6	544.4	707.3

Note: SE = Standard Error, b = Beta, p = P Value, AIC = Akaike Information Criterion, BIC = Bayesian information criterion, VC = Variance Components. Partial  $\eta^2$  = effect size, according to Cohen, J. (1988) considered 0.01 partial eta squared effect as small, 0.06 considered medium and 0.14 considered large, R2 (marginal) = variance explained by fix variables, R2 (conditional) = variance explained by fix and random variables.

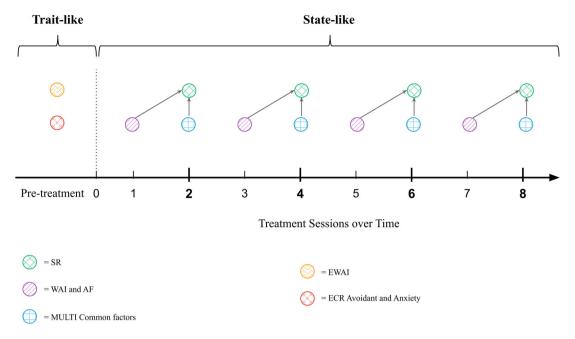


Figure 1. Predicting Successful Resolutions from Trait-like and State-like Measures by Time Points.

#### Discussion

Successful resolution of ruptures was found to contribute to lowering the risk of dropout from treatment and to better treatment outcome (Eubanks et al., 2019). Yet, the empirical work seeking to examine what leads to successful resolutions is scarce. The present study sought to contribute to filling this gap in the literature by investigating what contributes to successful resolutions, by separating patients' traitlike pre-treatment characteristics and state-like changes in treatment. The trait-like patient characteristics were not significantly related to the levels of successful resolution. By contrast, state-like changes in treatment were found to be significantly related to successful resolutions. The working alliance and therapist as an attachment figure, as measured before the session, as well as the common factor techniques used during the session, were significantly related to successful resolutions.

The first question asked if patient pretreatment trait-like characteristics were associated with successful resolutions. We found that patients' expected alliance, which refers to the patient's expectations regarding the future relationship with the therapist prior to their first meeting, and the patient's general attachment style were not related to the levels of successful resolutions. Our findings are consistent with previous studies examining rupture resolution episodes, which found no significant association between patients' trait-like characteristics (personality disorder) and the association between ruptureresolution and outcome (Eubanks et al., 2018).

However, our findings are inconsistent with a different study, which examined rupture resolutions by the self-report Post Session Questionnaire (PSQ; Muran et al., 2001, 2012) and attachment style by the Patient Attachment Coding System (PACS; Talia et al., 2017). The study found that secure attachment patients, as measured at an early session, are associated with higher levels of resolution of ruptures (Miller-Bottome et al., 2019). The mixed results may be due to differences in the measurement methods. The PACS captures the patient's attachment style by observing the patient-therapist interaction within therapy sessions, which is associated with the comment attachment interview (AAI; Adult Attachment interview) (Talia et al., 2017). Theoretical and empirical literature suggests that attachment self-reported measures, used in the current study, and the interview measure, are not associated and measure different constructs (Shaver & Mikulincer, 2004). Additionally, the 3RS, used in the current study, can perceive subtle ruptures that patients or therapists may not recognize and do not rely on memory at the end of the session. Following these differences, a recent study found that the PSQ and the 3RS yielded different results when measured in the same session (Eubanks et al., 2019).

In addition, our findings appear to be inconsistent with some of the literature regarding the relationship between trait-like characteristics and alliance ruptures. For example, Eames and Roth (2000) showed that increased incidence or intensity of ruptures was related to the patient's preoccupied attachment style. It can be suggested that the relationship

Additionally, we may assume that the relationship between pretreatment characteristics and successful resolutions is more complex and influenced by different moderators. Given that this study examined only some pre-treatment characteristics, using some measures, future studies should explore whether other patient characteristics contribute to successful resolutions, including mentalization levels (Luyten et al., 2020) or the dynamics of affect interdependence between patient and therapist at the first moments of their initial encounter (Bryan et al., 2018).

The second question of the study asked whether state-like changes in treatment contribute to successful resolutions. We found that the presence of a stronger working alliance, which reflects the patient's feelings regarding the current relationship with the therapist and the greater extent to which the therapist served as an attachment figure, at the previous session contributed to more successful resolutions at the next session. The finding regarding the working alliance is consistent with the relationship previously found elsewhere between ruptures coded by an external observer, and decreases in the selfreported working alliance (Coutinho et al., 2014). This finding is also consistent with the suggestions presented by Eubanks et al. (2018), according to which "patients who feel that they have a strong bond with the therapist are best suited to contribute to repairs" (p. 516).

The finding regarding therapist as an attachment figure is consistent with Mallinckrodt and Jeong (2015), who reported that attachment toward the therapist during therapy correlated highly with the working alliance. Hence, our current findings suggest that, when the therapist and the patient create a secure and positive relationship, the dyad can explore the here-and-now in a positive and secure way, which may lead to high levels of successful resolution. This finding did not reach significance when we controlled rupture occurrence.

Common factors techniques used by the therapist, from the patient perspective, were also found to be related to successful resolutions. These findings are also consistent with the empirical literature, which emphasizes the importance of therapeutic techniques for the development and maintenance of the working

alliance (Ackerman & Hilsenroth, 2003). According to the literature regarding the bidirectional relationship between common factors techniques and working alliance (Solomonov et al., 2018) and due to the fact that successful resolution and MULTI common factors were measured contemporaneously, it is possible that this relationship is bidirectional. Future studies should further explore the nature of this relationship.

When interpreting the present findings, it is important to take into account the limitations of the study. First, the design of the present study limited its findings; specifically, the small number of therapists, small therapist-patient ratio and small sample size. Although our sample was relatively large for the rupture resolution literature, it was still too small to detect small effects. Additionally, as in most psychotherapy research, the study design does not allow us to separate patient and dyadic variability, so they remain confounded. Second, in light of the efforts required to code sessions, we only focused on four time points in the early-middle stages of treatment, and we lack information about the development and the dynamic nature of the therapeutic relationship after this stage. This limitation also does not enable us to further examine the possible bidirectional nature of the relationship between successful resolutions and state-like changes in treatment. Third, in the present study, we used supportive-expressive treatment; it is possible that different treatment methods will yield different results, especially those focusing on repairing ruptures in the therapeutic relationship and on the formation of a corrective experience with the patient (Safran & Muran, 2000). Additionally, because the RCT is still ongoing and treatment type allocation is located at a third-party institution, we could not use the assignment to treatment condition as a potential control variable. Furthermore, due to the sample size, we could not distinguish between withdrawal and confrontation ruptures when controlling rupture occurrence.

Future studies should examine if the contribution of state-like changes in treatment to successful resolutions varies depending on the type of rupture that was resolved. Future research should also focus on expanding our understanding of the association between patients' trait-like characteristics and state-like changes in the resolution process. For example, patients with a higher vindictive interpersonal style may show a higher likelihood for successful resolutions when they expect a more positive alliance with the therapist at pretreatment than when they do not (Dolev-Amit, Eubanks & Zilcha-Mano, 2020).

This study suggests a complex view regarding the contribution of patients to successful resolutions.

The current findings emphasize the importance of the process that occurs within treatment, and the therapeutic context in which the resolution process takes place. They indicate that, when a good alliance is established, and the patient sees the therapist as an attachment figure, it is easier to work through ruptures that arise in treatment and achieve more successful resolutions. Good alliance, characterized by trust and collaboration, enables the dyad to be attuned enough to recognize ruptures, sensitively address them, and tolerate the anxiety that can come when one tries to resolve ruptures (Muran & Eubanks, 2020; Safran & Muran, 2000). However, when there is a poor alliance, and the patient does not see the therapist as an attachment figure, it is harder to work through ruptures and successfully resolve them.

Repairing alliance ruptures can be a challenging process for both therapists and patients and requires at least basic levels of trust and collaboration. Therefore, when the patients and therapist were able to build a strong alliance between them, any rupture coming afterward appears in the context of basic mutual trust in the others' good intentions. In contrast, when the patient and therapist are not able to build a strong alliance, and subsequent rupture appears on the ground of an unstable therapeutic relationship that lacks mutual trust and collaboration, the task of resolving ruptures becomes remarkably challenging and first techniques aimed at building the alliance should be used (Muran & Eubanks, 2020). In the context of a poor alliance with low bond the therapist may need to be more careful about blaming the patient for the rupture through the resolution process. The therapist may feel more anxious or pressured in the context of a poor alliance, which may interfere with their ability to successfully resolve ruptures. If any blame is experienced, either the patient is more sensitive and hence more likely to perceive what the therapist says as blame, or the therapist might be more likely to say something in a blaming way, it might be more damaging in a poor alliance than in a good alliance context. These two contexts may require distinct repair strategies, ranging from surface to more in-depth (Safran & Muran, 2000). It might be the case that surface-level repair strategies will deal with the experience of blame better. However, it also may be the case that it will be important to explore a rupture more in-depth in a poor alliance situation, but the therapist will need to do more validating of the patient's position and more acknowledging of their own contribution. It is possible that resolution strategies need to be accompanied by other techniques that may help to strengthen the alliance, such as common factor techniques, that were

found in the current study to contribute to successful resolutions. These findings regarding the state-like contribution to successful resolutions are consistent with relational perspectives, which emphasize the importance of a strong and positive relationship within the patient-therapist dyad for openly exploring and discussing certain matters in treatment (Wachtel, 2007). Future research should examine whether brief psychotherapy interventions focusing on techniques that strengthen the alliance contribute to higher levels of successful resolutions. The current study emphasizes the importance of state-like changes that occur within treatment and not the pretreatment trait-like characteristics, for achieving successful resolution of alliance ruptures.

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