Psychotherapy

A Moderating Factor for Patients With Vindictive Interpersonal Problems

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Individuals high in vindictive interpersonal problems tend to experience and express anger and irritability. In treatment, they have poor prognosis for alliance and outcome. We propose that positive expectation may serve as a moderating factor for these patients. In the current study, we examined the ability of expected alliance to act as a moderating factor in the early process and early progress of treatment for patients with vindictive interpersonal problems. A sample of 65 patients received short-term dynamic psychotherapy. At intake, before meeting the therapist, participants completed assessments for vindictive interpersonal problems and expected alliance. All therapy sessions were videotaped, and Session 2 was coded for confrontation ruptures. Early progress was assessed using the improvement from intake to Week 2 in the measure of distress from interpersonal relations. Our results show that, at high levels of vindictive interpersonal problems, higher expected alliance was associated with fewer confrontation ruptures. At high levels of vindictive interpersonal problems, higher expected alliance was associated with greater early improvement in distress from interpersonal relations. The findings demonstrate how positive expectations may function as a moderating factor that enables patients with vindictive tendencies to achieve a positive process and progress early in treatment.

Clinical Impact Statement
Question: Can more positive alliance expectations serve as a resilience factor in the early process and outcome of treatment for patients with vindictive interpersonal problems. **Findings:** Patients with higher levels of vindictive interpersonal problems who are able to hold higher expectations from the therapist before the start of treatment are less at risk to show early confrontation ruptures and more likely to have early reduction in distress from interpersonal relations. **Meaning:** The study highlights an optimistic view for patients with vindictive interpersonal problems, in which positive expectations from the alliance before the start of treatment may function as a resilience factor enabling a better process and early outcome. **Next Steps:** Future studies should systematically examine the long-term effects of positive alliance expectations as a resilience factor for treatment success in patients with higher levels of vindictive interpersonal problems.

Keywords: alliance, ruptures, vindictive interpersonal problems, process, treatment

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Patients with hostile dominant interpersonal problems are characterized by controlling, manipulative, distant, and cold patterns of communication, which pose challenges to those who treat them. Among hostile dominant interpersonal problems, vindictive ones are the most frequent (Ollila, Knekt, Heinonen, & Lindfors, 2016; Puschner, Kraft, & Bauer, 2004; Renner et al., 2012). Patients with higher vindictive interpersonal problems are characterized by hostility and dominance in interactions with others. They tend to readily experience and express anger and irritability and expect others to respond with little support or concern. These patients reflect distrust and suspicion toward others and do not care about the needs of others (Horowitz, Alden, Wiggins, & Pincus, 2003). In previous studies, it was found that greater vindictive interpersonal problems were related to a higher prevalence of personality

disorders, particularly of the antisocial and narcissistic type (Haggerty, Hilsenroth, & Vala-Stewart, 2009).

Despite the negative implications of patients with vindictive interpersonal problems in treatment, little is known about their behavior that may assist in positive treatment outcomes. From the little that is known, patients with higher vindictive interpersonal problems are less likely to seek treatment (Ollila et al., 2016). When they do seek treatment, they show a maladaptive process of treatment, especially with difficulty in building a strong alliance (Johansson & Jansson, 2010) and are less likely to benefit from treatment (Luyten, Lowyck, & Vermote, 2010).

Patients with higher levels of vindictive interpersonal problems also show difficulty in forming significant relationships with others, including the therapist. Theoretical conceptualizations describe that some patients communicate by expressing their dissatisfaction with the therapist in a hostile vindictive manner, for example, through direct complaints about the tasks and progress of treatment (Muran, 2019; Safran & Muran, 2000). Such hostile and vindictive communication is often manifested as alliance confrontation ruptures, when patients move away from or against the therapist in a noncollaborative manner (Eubanks, Lubitz, Muran, & Safran, 2019; Safran & Muran, 2000). Studies have shown that greater vindictive interpersonal problems were negatively associated with the overall alliance, as reported from the perspective of the patient (Johansson & Eklund, 2006; Johansson & Jansson, 2010), therapist (Puschner, Bauer, Horowitz, & Kordy, 2005), and research staff (Johansson & Eklund, 2006), and with an agreement between patient and therapist on the goals of treatment (Muran, Segal, Samstag, & Crawford, 1994). Moderate levels of vindictive interpersonal problems were found to be the only type of interpersonal problems that did not show improvement in alliance through treatment (Ollila et al., 2016).

In addition to an impaired process of treatment, individuals with vindictive interpersonal problems also tend to show poorer treatment outcomes. Previous studies have reported that patients with greater vindictive interpersonal problems pretreatment showed less reduction of symptoms as a result of treatment, both at the end of the active phase of treatment and at follow-up (Borkovec, Newman, Pincus, & Lytle, 2002; Luyten et al., 2010). Greater vindictive interpersonal problems were also associated with poorer mid-late improvement in treatment outcome (session seven; Ruiz et al., 2004). Although it has not been tested empirically yet, it can be expected that vindictive interpersonal problems affect outcomes from the first stages of treatment because of the limited ability of the treatment to benefit these patients' interpersonal relations.

Given the adverse effects of vindictive interpersonal problems on the process and outcome of treatment, it is important to identify moderating factors that may enable individuals with such problems to benefit from an adaptive treatment course and outcome. As noted by Lambert and Barley (2001), important potential moderating factors suggested in the literature include certain therapy techniques, extratherapeutic factors, and expectancy effects. Expectations may be an important contributing factor to the adverse effect of vindictive tendencies in interpersonal relations. Because these patients are generally characterized by suspiciousness and low trust (Horowitz et al., 2003), they may have negative expectations from the therapist before the start of treatment. Concerning this, it has been suggested that expectations regarding the process and outcome of treatment could be a core ingredient that may

determine the efficacy and effectiveness of treatment (Constantino, Arnkoff, Glass, Ametrano, & Smith, 2011). In particular, negative expectations from the therapist were found to predict poor alliance throughout treatment resulting in poor benefits and treatment outcomes (Barber et al., 2014). Hence it is reasonable to assume that, if patients with vindictive interpersonal problems arrive at treatment with more positive expectations, they can form a better adaptive relationship with the therapist. In contrast, patients with vindictive interpersonal problems who arrive at treatment with less positive expectations, may have a more difficult time developing a positive relationship with the therapist. Whereas negative expectations of others may generally harm the ability of patients with vindictive interpersonal problems to benefit from treatment, positive expectations may have the potential to mitigate these adverse effects early in treatment.

After taking into account the previous research done, the current study examines the ability of expected alliance to act as a moderating factor in the early process and early progress of treatment for patients with vindictive interpersonal problems. Although patients with vindictive interpersonal problems may be generally associated with poorer prognosis for early process and progress, we expected there to be heterogeneity between them. It was previously found that there is heterogeneity within different disorders. For example, in conduct disorder there are many different combinations of symptoms (Kazdin, 2008); this is also true, among others, for borderline personality disorder (Clarkin, Widiger, Frances, Hurt, & Gilmore, 1983) and major depressive disorder (Zimmerman, Ellison, Young, Chelminski, & Dalrymple, 2015). There is a need for more personalized approaches to improve efficacy of treatment (Wright & Woods, 2020). From this it seems that there will be variability in patients with vindictive interpersonal problems and there may be protecting factors such as expected alliance. Particularly vindictive interpersonal problems in patients with depression will be examined, as these patients exhibit these problems more than the general population (Barrett & Barber, 2007). In addition to depression, many of these patients have at least one comorbid personality disorder (Friborg et al., 2014), such as narcissism and antisocial personality disorders, which have high comorbidity with vindictive interpersonal problems and may be particularly problematic in treatment.

Additionally, identifying who may benefit more from treatment in its early stages is of great importance for reducing suffering. It is especially important to tailor treatment early, when the alliance is formed and there are first indications of the extent to which patients can improve, but there is still room for change before treatment is over (Frank & Frank, 1961; Ilardi & Craighead, 1994). It is accepted that the patterns of change which appear early in treatment are robust predictors of its later course (Lutz et al., 2014; Rubel et al., 2015; Zilcha-Mano & Errázuriz, 2017). Examining early process and progress can provide meaningful information for treatment adaptation and optimization. The study has two main aims:

> (a) Early Process: To examine whether the association between vindictive interpersonal problems and confrontation ruptures is moderated by the expected alliance, suggesting that patients with vindictive interpersonal problems who arrive at treatment with positive expectations of the alliance

exhibit fewer confrontation ruptures than do patients with less positive expectations of the alliance, early in the treatment.

(b) Early Progress: To examine whether the association between vindictive interpersonal problems and early change is moderated by the expected alliance, suggesting that patients with vindictive interpersonal problems who arrive at treatment with positive expectations of the alliance exhibit greater early improvement in distress from interpersonal relations than do patients with less positive expectations of the alliance. It is reasonable to assume that early improvement will affect distress from interpersonal relations (Lambert et al., 1996), rather than symptom change. Distress from interpersonal relations is the most immediate and relevant difficulty exhibited by patients with vindictive interpersonal problems and is expected to show early improvement.

Method

Participants

Participants in the current study were part of the training and active phase of an ongoing randomized controlled trial involving supportive expressive therapy (SET) for depression, conducted in the University of Haifa (Zilcha-Mano, Dolev, Leibovich, & Barber, 2018). Inclusion criteria were (a) a diagnosis of major depressive disorder based on structured clinical interviews in accordance with *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, with scores above 14 on the 17-item Hamilton Rating Scale for Depression (Hamilton, 1967) at two evaluation points, 1 week apart, and a diagnosis of major depressive disorder based on the MINI (MINI International Neuropsychiatric Interview; Sheehan et al., 1998); (b) if on medication, patients' dosage has been stable for at least 3 months before the start of the study, and patients were willing to maintain stable dosage for the duration of treatment; (c) age between 18 and 60 years; (d) provision of written informed consent. Exclusion criteria were (a) current risk of suicide or self-harm (Hamilton Rating Scale for Depression Suicide item >2); (b) current substance abuse disorder; (c) current or past schizophrenia or psychosis, bipolar disorder, or severe eating disorder, requiring medical monitoring; (d) history of organic mental disease; (e) currently in psychotherapy.

Sixty-five patients who met the study criteria were randomized to supportive or expressive focused SET. Forty participants (61.5%) were women; average age was 32 years ($SD = 8.9$). Most patients, 72.3%, were single; 24.3% were married or cohabiting; and 3% were divorced. Eleven percent were high school graduates, 37% had some college education, 24.6% were college graduates, 9.2% had some postgraduate 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.

Therapists

The therapists attended a 20-hr training workshop in supportive and expressive techniques before seeing patients and had weekly supervision throughout the study. Therapists acted as their own controls to avoid nesting of therapists within treatment conditions, which may result in unwanted confounding. Eight therapists participated in the study, of whom five were women; average age was 39 years ($SD = 6.5$). Therapists had a range of 4–20 years of clinical experience ($M = 11$, $SD = 6.1$). The therapists treated a median of 6.5 patients (range 2–18).

Treatment

SET, a manual-based treatment (Book, 1998; Luborsky, 1984; Luborsky, Mark, Hole, Popp, & Goldsmith, 1995), was provided for 16 individual weekly sessions, either with supportive-expressive focus (e.g., interpretation, confrontation, clarification) or supportive focus (e.g., affirmation, empathic validation). In the supportive-expressive condition, therapists follow the entire manual; in the supportive condition, the expressive component is excluded.

Measures

Vindictive interpersonal problems. To assess vindictive interpersonal problems, we used the Inventory of Interpersonal Problems–Circumplex (Alden, Wiggins, & Pincus, 1990; Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988), a 32-item self-reported inventory assessing behaviors related to interpersonal problems. Items were rated on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). The IIP uses eight subscales conceptually arranged in a circumplex (Alden et al., 1990). The Vindictive/Self-Centered Interpersonal Scale (VIND) contains four items describing problems in hostile dominance. The items are as follows: It is hard for me to: (a) be supportive of another person's goals in life; (b) really care about other people's problems; (c) put somebody else's needs before my own; and (d) feel good about another person's happiness. Higher scores indicate more vindictive interpersonal problems. Internal reliability for vindictive interpersonal problems in the current study was .80.

Expected alliance. To assess the expected alliance, we used the Working Alliance–Short Form pretreatment (EWAI; Barber et al., 2014; Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989). EWAI is a 12-item self-report measure assessing the alliance that closely follows the theoretical model proposed by Bordin (1979), assessing agreement between patients and therapists on the goals of treatment, agreement on the tasks or interventions of treatment, and the affective bond between the patient and therapist. Items were rated on a 7-point Likert scale ranging from 1 (*never*) to 7 (*always*). Patient's expectations for alliance were assessed before meeting with the therapist. The following sentence was added to the instructions of the WAI: "Because you have not yet experienced treatment as part of this study, answer the following questions by thinking about how you expect treatment to be." Internal reliability for expected alliance in the current study was .78.

Early process. To assess confrontation ruptures, we used the Rupture Resolution Rating System (Eubanks, Muran, & Safran, 2015), an observational system for coding rupture markers and resolutions. Watching recorded sessions, divided into 5-min segments, coders noted events attesting to lack of collaboration or tension between patient and therapist. After it was identified, a rupture was coded as confrontation (CF) or withdrawal (WD).

Clarity 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 frequency of each type of rupture was summed up across the segments of the session.

All coders received 6 months of training (approximately 100 hr) from an experienced coder. In the first month, the coders learned the theoretical background, and in the next 5 months, they practiced coding of therapy sessions. Coders were not used in the study until they achieved adequate reliability. During the coding phase, all coders received weekly supervision to maintain reliability. Each session was coded by a pair of coders, drawn from a pool of eight undergraduate students in psychology. All coders were blind to the study hypothesis. The confrontation ruptures variable is a continuous variable and is normally distributed. The intraclass correlation coefficients (ICC) for confrontation ruptures in the current study was .92.

Early Progress

To assess early improvement in distress from interpersonal relations, we used the Interpersonal Relations subscale of the Outcome Questionnaire–30 (OQ-30; Lambert et al., 1996). The OQ-30 is a 30-item self-report measure assessing distress, designed to measure patient progress. Items were rated on a 5-point Likert scale ranging from 1 (*never*) to 7 (*almost always*). The OQ-30 has three subscales assessing symptom distress, interpersonal relations, and social role performance. A total score is also calculated. The Interpersonal Relations subscale (IR OQ) has six items assessing patient satisfaction regarding interpersonal functioning. Higher scores indicate more distress and dissatisfaction from interpersonal relations. The internal reliability of the OQ-30 in the current study was .87, and of the Distress From Interpersonal Relations subscale was .54. This subscale internal reliability score is similar to a previous score found for this subscale (Zilcha-Mano & Errázuriz, 2017). This subscale is not frequently used as stand-alone variable, likely, in part, because the reliability and validity are questionable.

Procedure

The complete procedure is described elsewhere (Zilcha-Mano et al., 2018). Potential patients were recruited by self-referral, based on advertisements. All participants provided a written informed consent before participating in the study, including the understanding that all treatment sessions were to be videotaped, and that they had the right to withdraw from the research at any time. The procedures were approved by the institution's internal review board. Patients were randomized to two treatment groups, supportive and supportive expressive, of the SET manual-based treatment (Book, 1998; Luborsky, 1984; Luborsky et al., 1995). All study measures were completed at two intake sessions, and subsequently session by session.

For the current study, we focused on ruptures in the second session of treatment, as coded by the Rupture Resolution Rating System. The second session was chosen because it is an early session that allows assessment of the patients' rupture style before interpretations were given in the active phase of treatment, and before change was noted in the therapeutic relationship. To assess pretreatment vindictive interpersonal problems and expected alliance, the patients completed the Inventory of Interpersonal Problems–Circumplex and the EWAI at intake. To assess improvement in distress from interpersonal relations, the patients completed the IR OQ at intake and at Session 2, when the ruptures were coded, and a change score was calculated between the two time points.

Data Analysis

To examine if the data need to be hierarchically nested on two levels (nested within patients nested within therapists), we examined the therapist random effect in both models. In the first model predicting early process, with confrontation ruptures as the dependent variable, the estimated variance of the therapist random effect therapist effect was null and nonsignificant (estimate = 0, p = .99). In the second model predicting early progress, with improvement in interpersonal relationships as the dependent variable, the estimated variance of the therapist's random effect was also null and nonsignificant (estimate = 0, p = .99). Therefore, it was not necessary to use multilevel models in both models (Finch, 2015). Descriptions of the scales appear in Online Supplement 1 and 2.

First model: Early process. In the first model, predicting early process, we examined the relationship between vindictive interpersonal problems and expected alliance on confrontation ruptures. We used regression-based moderation analysis, implemented as Model 1 of the PROCESS macro for SPSS (Hayes, 2012). The vindictive interpersonal problems scores were the independent variable (X), with expected alliance scores as the moderator (M), and confrontation ruptures as the dependent variable (Y; Figure 1). We examined the model using a moderation analysis, a two-way interaction between vindictive interpersonal problems and the expected alliance (VIND × EWAI) on confrontation ruptures (CF). The predictors were mean-centered before the analysis. The post hoc analysis of the moderation effect was conducted by bias-corrected and accelerated bootstrapping analysis, based on 5,000 repetitions (Hayes, 2017), and estimated the slopes of VIND on CF between high (+1 *SD*), medium (mean), and low (−1 *SD*) WAI levels.

Second model: Early progress. In the second model, predicting early progress, we examined the relationship between vindictive interpersonal problems and expected alliance on improvement in distress from interpersonal relationships. Improvement in distress from interpersonal relationships was calculated as a change score from intake to Week 2. Calculating changes in symptoms as deltas when looking at this type of data, is preferred over residual scores even when there are correlations between time points (Castro-Schilo & Grimm, 2018). In addition, the change score is a more accurate when we want to answer the question of how do groups, on average, (in the present study high vs. low vindictive interpersonal problems), differ in their improvement and recommend using residual change only for studies randomizing the interpersonal difficulties (Fitzmaurice, Laird, & Ware, 2004). We used regression-based moderation analysis, implemented as Model 1 of the PROCESS macro for SPSS (Hayes, 2012). The vindictive interpersonal problems scores were the independent variable (X), with expected alliance scores as the moderator (M), and improvement in distress from interpersonal relationships as the dependent variable (Y; Figure 1). We examined the model using a moderation
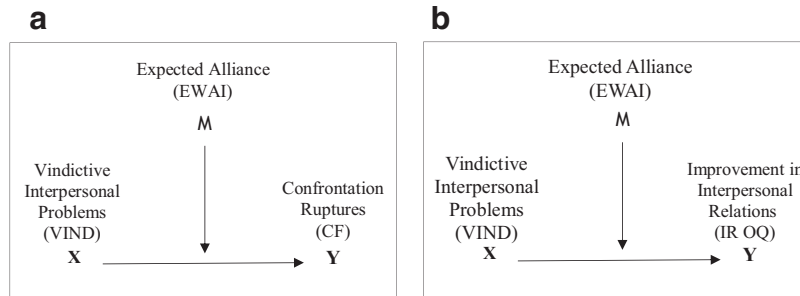
a

Expected Alliance
(EWAI)

M

Vindictive
Interpersonal
Problems
(VIND)

X

Confrontation
Ruptures
(CF)

Y

b

Expected Alliance
(EWAI)

M

Vindictive
Interpersonal
Problems
(VIND)

X

Improvement in
Interpersonal
Relations
(IR OQ)

Y

Figure 1. (a) According to the proposed model, the association between vindictive interpersonal problems (X) and confrontation ruptures (Y) can be moderated by the expected alliance (M). (b) According to the proposed model, the association between vindictive interpersonal problems (X) and early improvement in distress from interpersonal relations (Y) can be moderated by the expected alliance (M). VIND = Vindictive/Self-Centered Interpersonal Scale; EWAI = Working Alliance–Short Form pretreatment; CF = confrontation ruptures; IR OQ = Interpersonal Relations subscale of the Outcome Questionnaire–30.

analysis, a two-way interaction between vindictive interpersonal problems and the expected alliance (VIND × EWAI) on the early progress (IR OQ). The predictors were mean-centered before the analysis. The post hoc analysis of the moderation effect was conducted by bias-corrected and accelerated bootstrapping analysis, based on 5,000 repetitions (Hayes, 2017), and estimated the slopes of VIND on CF between high (+1 SD), medium (mean), and low (−1 SD) WAI levels.

Results

Early Process

In the first step, expected alliance and vindictive interpersonal problems were entered ($R^2 = 3.1\%$). In the second step, a moderation analysis revealed a significant effect for the two-way interaction between vindictive interpersonal problems and expected alliance (VIND × EWAI) on confrontation ruptures (CF; B = −.08, SE = .03), $t(61) = −2.71$, $p = .009$, R^2 change = 10.43%, 95% confidence interval [−.14, −.02]. For patients with high pretreatment VIND levels, there was a significant negative relationship between the EWAI and CF levels (B = −.46, SE = .16), $t(61) = −2.89$, $p = .005$. However, for patients with medium and low pretreatment VIND levels, there was no significant relationship between the EWAI and CF levels (B = −.14, SE = .12), $t(61) = −1.19$, $p = .23$; (B = .18, SE = .17), $t(61) = 1.02$, $p = .30$, respectively. See Online Supplement 3. The findings suggest that, for patients expecting to form a positive alliance, there was a strong negative relationship between vindictive interpersonal problems and confrontation ruptures in the second session. In contrast, patients expecting to form a negative alliance did not show the same pattern; rather, there was no relationship between vindictive problems and confrontation ruptures (see Figure 2).

Early Progress

In the first step, expected alliance and vindictive interpersonal problems were entered ($R^2 = 6.5\%$). In the second step, a moderation analysis revealed a significant effect for the two-way interaction between vindictive interpersonal problems and ex-

pected alliance (VIND × EWAI) on early progress (IR OQ; B = .04, SE = .02), $t(61) = 2.08$, $p = .04$, R^2 change = 6.23%, 95% confidence interval [.002, .09]. For patients with high pretreatment VIND, there was a significant positive relationship between the EWAI and IR OQ levels (B = .31, SE = .11), $t(61) = 2.62$, $p = .01$. However, for patients with medium and low pretreatment VIND levels, there was no significant relationship between the EWAI and IR OQ levels (B = .12, SE = .08), $t(61) = 1.45$, $p = .15$; (B = −.05, SE = .13), $t(61) = −.43$, $p = .66$, respectively. See Online Supplement 3. The findings suggest that, for patients expecting to form a positive alliance, there was a strong positive relationship between vindictive interpersonal problems and improvement in interpersonal distress. In contrast, patients expecting to form a negative alliance did not show the same pattern; rather, there was no relationship between vindictive interpersonal problems and improvement in interpersonal distress (see Figure 2).

Post Hoc Analyses

Alternative variables of the current models did not produce similar results. The goal of the post hoc analysis is to better understand what are the specific interpersonal difficulties related to early process and progress. In the context of depression, self-criticism is specifically important. That is why as an alternative to vindictive interpersonal problems, we examined the Depressive Experiences Questionnaire (Blatt, D'Afflitti, & Quinlan, 1976) for self-criticism on early process (B = .02, SE = .03), $t(60) = .76$, $p = .44$, and early progress (B = −.02, SE = .02), $t(60) = −1.16$, $p = .25$. To better understand the characteristics of vindictive interpersonal problems in treatment as an alternative to confrontation ruptures, we examined the degree to which rupture was resolved (B = .004, SE = .04), $t(61) = .09$, $p = .92$; and resolution frequency (B = −.001, SE = .02), $t(61) = −.09$, $p = .92$. The repair of ruptures is more complex because it is an interaction between patient and therapist that includes the therapist characteristics and is more of a dyadic construct. These nonsignificant findings suggest that the current results of the study are specific to vindictive interpersonal problems and what the patient brings to the therapeutic relationship.
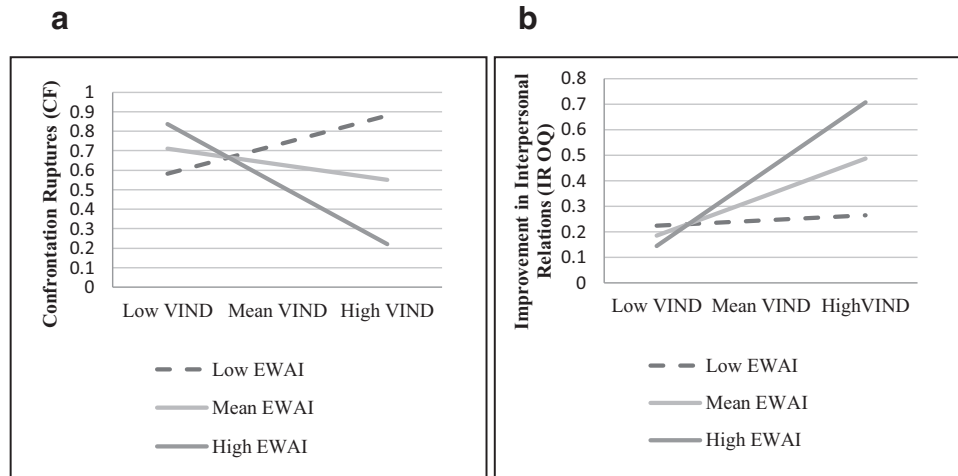
a

b

Figure 2. (a) The moderation effect of the expected alliance on the association between vindictive interpersonal problems and confrontation ruptures. (b) The moderation effect of the expected alliance on the association between vindictive interpersonal problems and improvement in distress from interpersonal relations; higher levels of interpersonal relations reflect more improvement. VIND = Vindictive/Self-Centered Interpersonal Scale; EWAI = Working Alliance–Short Form pretreatment; CF = confrontation ruptures; IR OQ = Interpersonal Relations subscale of the Outcome Questionnaire–30.

Clinical Demonstration

For a microlevel analysis of the proposed moderation model, two patient case studies were chosen from the trial. The same session used in the macrolevel analysis (Session 2) was used in these cases as well. The names and details of the patients and therapist were disguised, and they all signed informed-consent forms agreeing to publication of the cases. We chose one patient with high vindictive interpersonal problems and higher expected alliance, and another with high vindictive interpersonal problems and lower expected alliance. Both patients were treated by the same therapist, a clinical psychologist in his late forties, with 20 years of experience.

The first patient, Hannah, was a woman in her early thirties. This case was chosen because the patient showed high vindictive problems at intake (VIN = 10, *T score* = 72) and high expected alliance (EWAI = 6.50). Despite initially high vindictive interpersonal problems, early in the treatment she was able to form a satisfying, strong alliance with the therapist. In the first session during treatment, she described instances where, outside the therapy room, she showed hostility, anger, and distrust toward others. Hannah spoke about a close school friend with whom she frequently got into fights, expressing anger, irritability, and inability to forgive him when she felt insulted by him. Hannah frequently said things like, "I can't believe he did that. It was just wrong of him to say that to me. He made me so angry! He must be acting this way just to spite me; I will never forgive him." The therapist responded by saying "You see other people as bad and mean, maybe you see me that way too." Hannah's response was calm saying "No, you're fine, it's the people outside this room." Later in treatment on a different occasion Hannah was angry, talking about someone who cut in line in front of her in the supermarket, saying "I was so mad at him, who does he think he is? But then after a calmed down I thought about the things you said to me in

our sessions and wondered if there is a different way I can respond." The relationship Hannah was able to form with the therapist, in the first sessions, trusting and opening up to him, helped deepen her understanding of her interpersonal patterns and create more positive relationships outside of therapy.

The second patient, Adam, was a man in his early thirties. This case was chosen because Adam showed high vindictive problems at intake (VIN = 10, *T score* = 72) and lower expected alliance (EWAI = 3.67). Early in treatment, Adam described instances in which he was hostile toward his boss and showed distrust and hostility toward his romantic partner. This pattern was also present in the therapy room, where he would express anger and distrust toward the therapist, in a noncollaborative manner. Adam expressed that he did not see the point of talking about his past and did not think that what the therapist did was useful "talking about my past is not useful, I came to you so you will help me with my depression and I don't know why you want me to do this." In early sessions he also complained that the day the sessions were held was not convenient for him, and could not accept the fact that it could not be changed, saying in a hostile tone "I don't understand why can't we just change the day of the session, It's like you don't want me to get better." He raised many difficulties in the therapy room, and when the therapist tried to propose a solution, he did not accept the suggestions, deepening his vindictive interpersonal problems with the therapist.

Discussion

Vindictive interpersonal problems are common, and they harm the process and the outcome of treatment (Johansson & Jansson, 2010; Luyten et al., 2010). Patients with higher vindictive interpersonal problems tend to expect others to respond to them with little support or concern, and in turn they express anger and irritability (Horowitz et al., 2003). Less is known about the poten-

tial moderating factors affecting the process and early progress of therapy for these patients. Without having this knowledge about patients with vindictive interpersonal problems, therapists may find it difficult to assist patients in treatment and to overcome the generally negative prognosis of these patients. Consequently, the patients' expectations from others may reoccur with the therapist and may prevent them from benefiting from treatment. The present findings and the clinical demonstration of Hannah and Adam suggest that positive expectations of the alliance with the therapist can serve as a moderating factor for patients with vindictive interpersonal problems. The current study shows that expecting a positive relationship with the therapist before starting treatment may be evidence of heterogeneity among patients with vindictive interpersonal problems which predicts better early process and early progress.

Regarding the tendency of individuals with vindictive interpersonal problems, as a group, to have poorer alliances with their therapists and poorer early progress (Johansson & Jansson, 2010; Luyten et al., 2010), the current study found that patients with vindictive interpersonal problems coming into treatment with positive expectations of the alliance showed fewer confrontation ruptures early in treatment and more early improvement in distress from interpersonal relations. It should be noted that this progress measure is not frequently used as a standalone variable. These findings are important because they show that it is possible to predict initial improvement in interpersonal relations which are similar to well-being. These findings suggest that positive expectations from the alliance can serve as a moderating factor for patients with vindictive interpersonal problems. The study distinguished between two types of patients with high vindictive interpersonal problems. The first had low expectations of the alliance, which matched their low expectations of relationships in general. These patients had more conflicts with the therapist, in the form of confrontation ruptures, and less improvement in distress from interpersonal relations. The second type had high expectations of the alliance, and expected the therapeutic alliance to be different from their other relationships. These patients were more collaborative and respectful, had fewer confrontation ruptures with the therapist, and greater improvement in distress from interpersonal relations. In seems that these results are specific to vindictive interpersonal problems and confrontation ruptures, given the post hoc results.

The findings regarding the moderating effect of positive expectations from the alliance are consistent with previous findings on the profound effects of expectations in psychotherapy (Button, Norouzian, Westra, Constantino, & Antony, 2019; Constantino et al., 2011; Constantino, Vîslă, Coyne, & Boswell, 2018) and outside it. Expectations were found to have a great effect in many fields of science, and to be related to many adaptive consequences, as, for example, in education and in the workplace (Eden, 1984; Good, Sterzinger, & Lavigne, 2018). Expectations have also been found to positively affect the process and outcome of psychotherapy. In a review of the role of expectations in psychotherapy, their effect was found to be important for better treatment outcome and a more positive alliance, including alliance early in treatment (Greenberg, Constantino, & Bruce, 2006). The expectations from alliance demonstrated in the current study confirm similar previous findings (Barber et al., 2014) of being significant with regard to early alliance and outcome of treatment, and possibly leading to

fewer ruptures and a greater ability to benefit from treatment for vindictive interpersonal problems.

Although patients with vindictive interpersonal problems, as a group, are generally characterized by negative expectations from others, the current findings point to heterogeneity among these patients, showing that their expectations from the therapist may vary. It has been shown previously that there is heterogeneity in similarly diagnosed patients in psychotherapy, and that patients sharing the same diagnosis can exhibit different difficulties in treatment. For example, a study found that distinct interpersonal subgroups of panic disorder showed widely different alliance development in treatment (Zilcha-Mano et al., 2015). This heterogeneity may also be true for patients with vindictive interpersonal problems, who may show heterogeneity in their flexibility regarding their vindictive interpersonal problems. There appears to be a subgroup of patients with vindictive interpersonal problems that holds a positive view of the therapist, even if generally they have negative expectations from others. The ability to identify such heterogeneity in individuals with vindictive interpersonal problems is critical for progress toward developing personalized treatment for this population (DeRubeis, 2019), and for clarifying which ingredients enable individuals with vindictive interpersonal problems to benefit from treatment aimed at their interpersonal well-being. The findings of the current study may promote such targeted treatment, better suited for each subgroup of patients with vindictive interpersonal problems.

The clinical question that arises from this study is how can someone who is vindictive, reporting having difficulty being supportive of another person's goals in life and having a hard time putting somebody else's needs before their own, come to develop positive expectations of the therapist? A potential explanation may be found in attachment orientation (Bowlby, 1982) and the conceptualization that there may be context-specific or relationship-specific attachment representations, in addition to a general attachment representation (Bowlby, 1988; Mikulincer & Shaver, 2003). It may be that patients with vindictive interpersonal problems, although they generally represent others as vindictive, have a more positive and secure representation of the expected attachment relationship with the therapist. This is also consistent with other theories, such as different representations within the self for different relationships with others. In relational therapy, this may be conceptualized as different voices-of-the-self (Gregg, 1991), and in schema therapy, as different schemas about oneself, others, and events (Young, 1994).

The current study has several limitations that should be addressed in future research. The first and most important is the progress measure. The OQ-30 is a commonly used measure, yet the low reliability of the measure of distress from interpersonal relations is a limitation of the study. As this particular subscale is not frequently used as a standalone progress measure, likely because of the low reliability, future studies should look into other related measures. Another limitation is the small patient sample size. Additionally, vindictive interpersonal problems were assessed using a self-reported measure, raising the question of how self-aware patients with vindictive interpersonal problems are. Although the instrument used in this study is widely used to measure the construct of interpersonal problems, the results may have been different if vindictive interpersonal problems had been measured differently, for example, based on other informants

(such as family member or significant other), or by clinical interview. Future studies should also examine the therapist perspective and the therapists' reaction to these patients. The current study examined the association between vindictive interpersonal problems and expectations from the alliance, from the patient perspective, on early process and early progress. This is consistent with previous studies focusing on the importance of early changes for the course of treatment (Lutz et al., 2014; Rubel et al., 2015); however, this is a small snapshot of the therapeutic process. Future studies should examine how this effect can change over the course of treatment. It is especially important to examine ruptures in later sessions, as it is known that ruptures, if resolved, may have a positive effect and may potentially change these patients' vindictive interpersonal problems.

In addition to the limitations, the current study focused on confrontation ruptures, which are more associated with hostile and vindictive communication. However, due to our small sample size, we could not assess whether patients with high vindictive interpersonal problems have a tendency to show lower confrontation ruptures and higher withdrawal ruptures, which can be addressed as passive aggressive. In addition, the significance of ruptures was not assessed in the current study, which considered only frequency. Future studies should examine whether the results differ when the significance of ruptures is examined. Furthermore, because this study was part of an ongoing randomized controlled trial, we could not use the assignment to treatment condition as a potential control variable. Although the two conditions are similar in their early sessions, future studies should examine differences between treatment types. Given that this study showed the importance of examining patients with vindictive interpersonal problems, future studies should explore other moderating factors, in addition to positive expectations, such as attachment style and level of insight, which may support better processes and outcomes for patients with vindictive interpersonal problems.

In contrast to the difficulty documented for patients with vindictive interpersonal problems, the current findings suggest a more optimistic view. They emphasize the importance of positive expectations from the therapeutic relationship, with fewer confrontation ruptures and improvement in distress from interpersonal relations. Despite negative interpersonal characteristics, some patients manage to have a positive view of the therapist, which may lead to a more positive process and early progress. Therapists may be able to use this characteristic in clinical practice, where they can add a module in treatment focusing on improving the alliance early in treatment (Safran & Muran, 2000), as well as techniques aimed at strengthening expectations (Swift & Greenberg, 2015; Zilcha-Mano et al., 2019). As successfully resolved ruptures are a chance for positive change, early in treatment, therapists can use techniques focused on strengthening the alliance, dealing effectively with confrontation ruptures, and inspiring hope for the alliance, leading to better early process and early progress in treatment, when the therapist can still make a significant change (Lutz et al., 2014; Rubel et al., 2015). The study highlights that expectations of the alliance before the start of treatment may function as a moderating factor for patients with vindictive interpersonal tendencies. This will help the therapist understand patients' warning signs in treatment and allow to better understand positive factors that enable patients with vindictive interpersonal problems to achieve a positive process and progress early in treatment.

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